A STUDY OF DROPOUTS, REPEATERS, AND ASSOCIATED COSTS IN VENEZUELAN TEACHERS COLLEGES

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INTRODUCTION

The Setting

In Venezuela, the proper education of children in all social strata and the re-evaluation of the educational system as a means toward this end are of major concern today. These concerns occupy the attention of individuals from the highest governmental level to the parents and students themselves. The considerations at stake are varied and broad: they range from the wishes and ability of the country to compete and survive economically and industrially in an ever-increasingly competitive world to the acknowledged duty of a twenty-year old democracy to educate its citizens and develop their fullest potentials.

One hundred fifty seven years ago, in 1821, the country gained political independence from its colonial masters, but it has not yet achieved sufficient economic and educational independence to be regarded as a developed country. This independence has been the aim of the government during the last twenty years. Before 1958, there was a lack of governmental will on the one hand, and a lack of economic resources on the other, to set and execute plans to develop the

country. The one important exception to this rule is the Decree of Free and Compulsory Public Instruction of 1870, which makes it the duty of the State to provide free elementary education to all children in the nation. This decree has been the motivating force for actions directed at reasserting the human rights and dignity of the Venezuelan people.

The educational policy of the country has been developed by necessity, within the context of the general policy of the State. Education achieved progress during the democratic periods and suffered setbacks and restrictions during the long dictatorial ones. Since 1958 Venezuela has developed its educational policy within the context of representative democracy. This policy insures continuous academic functions and search for improved educational system and processes. Thus democratization of educational opportunities promotes the quantitative expansion as well as the quality of the educational system.

It is worthwhile to point out the quantitative educational advances during the past twenty years of democracy. In 1957-58, the last year of dictatorship, the national enrollment of students in all levels of the educational system was 844,642 from a population of about 7,000,000. Twelve years later, in 1969-70, there was a national enrollment of 2,100,520 from a population of about 10,000,000. By 1977-78 the total enrollment was 3,493,735 from a population of about 12,500,000. From these figures it is apparent that

the national government has exerted great efforts to provide educational opportunities for a fast-growing population. There has also been special effort in improving the quality of education. Many normal schools, teachers colleges and schools of education have been opened to prepare the elementary, secondary and higher education teachers needed to meet the growing demand for mentors.

Today the State, through its Ministry of Education, is engaged in promoting what is called an "educational revolution," a movement which has the following objectives: to provide quick translation of educational plans into reality, and to intensify the quantitative-qualitative changes sought, not only in formal education, but in all sectors of the social, cultural, scientific and technological communities (Ministerio de Educacion, 1975, p. 8).

Much discussion has taken place during the last twenty years about ways of improving the educational system, and many plans directed toward such ends as more curricula, better school buildings, a comprehensive preparation for teachers at all grade levels, and more efficient methods of teaching have been implemented. Valuable as such measures have been, they could only provide the means for a student to be educated; they could not insure that he would take fullest advantage of what was offered to him.

In spite of this drive toward a better quality of education, 60 per cent of all students in Venezuela still fail to complete any level in the educational system of the

country: they are dropouts. Problems of dropouts and repeaters as well as those students who were delayed in completing their degrees because of teachers' or students' strikes hinder the educational progress of the country.

Student dropout, student repetition and student and teacher strikes are not new in the Venezuelan system of higher education. They have existed for a long time and thus seem an integral part of the nation's educational history. These problems are particularly alarming when one considers the large economic resources which the country is expending to give its young free education from kindergarten to the university--resources which could well be utilized in other social programs to improve the lot of the people. This huge educational expenditure may be appreciated by viewing the fact that the educational budget has gone from 46.7 million dollars in 1957 to 1.23 billion in 1976, an increase of 2,616 per cent over a period of nineteen years.

The Problem

Ministry of Education planners and administrators of higher education in Venezuela are increasingly concerned with the problem of wastage in educational funds due primarily to high rate of student dropout and student repetition. A document released at the end of May 1976 by the Office of Planning and Budgeting of the Ministry of Education and translated by this writer, states:

> During the last two decades there has been a significant increase in the education sector appropriations. At present, the budget of the Ministry of Education is in the order of 1.23 billion dollars, being the third largest budget area of the national government. This general increment of expenditures is also reflected in the higher education sector. This sector got an appropriation of about 500 million dollars which represents almost 40 per cent of the educational budget. Also, cost per student has increased from 1,709 dollars in 1970 to 2,040 in 1974, meaning an annual rate of 4.8 per cent. This expansion in expenditures, however, has not brought with it a corresponding increase in the internal efficiency of higher education, if that efficiency is evaluated by taking into account the capacity of this sector to retain students until they graduate. A high rate of repetition gives an inflated number of students, which imposes a great burden in the cost of higher education (Ministerio de Educacion, 1976, p. 263).

Thus increasing school budget alone does not necessarily decrease the rate of student dropouts and repeaters.

Using the budget to finance implementation of educational programs tailored to the specific needs of students, and support complementary services such as guidance and counseling may stimulate students to learn and complete their studies within the prescribed curriculum years or earlier. Dropouts may decrease and even student and teacher strikes may be minimized, if not totaly averted. Such measures may keep educational wastage low which is one of the educational goals embodied in the 1976-1980 Fifth Plan of the nation.

Need for the Study

While some reports, as previously mentioned, indicate that student dropouts and repeaters contribute to national

wastage, the writer found no actual systematic study being made to determine rate of college or university student dropouts or repeaters in Venezuela. Likewise, no information on actual cost in wasted educational resources that may be traced to college dropout was found. More significant is the absence of data regarding college life experiences of students as perceived by them. The above needed data will surely help guide educators in Venezuela in planning and implementing rich and functional programs. Other individuals, like teachers and guidance counselors, involved in educating college students may also benefit if such data were obtained and made available.

The significance of studying perception of college students about their experiences in higher education may be summed up by quoting Netusil and Hallenbeck (1975, p. 263):

> It is important that the entire university community be concerned with the quality of experience its students are receiving and their reaction to the total university environment.

And they go on to say:

> College student satisfaction is an important, but little understood, variable which deserves much greater attention by the entire college community as the concern for retention of students increases.

Therefore, knowledge obtained and implications gleaned from college dropout and repeater study are highly valuable to the higher educational system of Venezuela in particular, and to the entire system in general, hence the study.

Purpose of the Study

The main objectives of this study were:

1. To determine the rate of student dropouts, repeaters and graduates in four selected teachers colleges in Venezuela.

2. To assess the cost or educational wastage due to dropping out and repetition.

3. To measure the perceptions of dropouts and repeaters in these colleges concerning their experiences in higher education and utilize these perceptions in formulating guidelines to minimize college dropouts and repetition.

Scope and Limitations

The study deals with four main variables, namely: college student dropout, college student repeater, economic wastage and perception of dropout and repeater regarding their experiences in the teachers colleges.

The writer recognizes that to try to make a study dealing with all institutions of higher education in the country would be too broad and difficult. Therefore, to complete the study within the specified schedule, the following limitations were imposed:

1. Limiting to four teachers colleges. The writer observed that the selected colleges are typical and therefore will truly represent this type of institution.

2. Restricting the size sample to 2,065 dropouts and

4,236 repeaters and further reducing respondents to 117 dropouts and 110 repeaters. It was felt that the size of these two samples was feasible and adequate to give indication of what has been happening about educational wastage in Venezuela. Total number of respondents was further reduced to 71 dropouts and 83 repeaters because of difficulty of tracing them, particularly the dropouts.

3. Restricting to three groups of students who composed the three cohorts of 1970-1974, 1971-1975 and 1972-1976. Going back beyond 1970 would not have been feasible since there were only few enrollees, and to draw samples from them would not have been truly representative of the populations of dropouts and repeaters. The period of study was extended until 1977 in order to see what happened to those students who did not graduate in the expected four years, but remained enrolled beyond that period.

4. Limiting to 17 items in the questionnaire for the dropouts and 13 for repeaters as shown in Appendices A and B. The writer believes that these selected items were adequate to provide a balanced and an accurate summary of the percentages of dropouts and repeaters regarding their experiences in the teachers colleges.

Definition of Terms

An attempt is made to refrain from using complicated or ambiguous terms in this study. All terms used are relatively common to the literature associated with college

matriculation. To avoid possible misunderstandings, however, explanations of certain key terms are provided below:

1. Dropout. A student who departed from college before graduation. In this study those dropouts who re-enrolled and repeaters who dropped out were not included.

2. Withdrawal. This term is sometimes used instead of dropout.

3. Repeater. A student retaking one or more courses resulting in failure to graduate within the prescribed curriculum years.

4. Non-repeater graduate. A student who finishes a degree course within the prescribed curriculum years.

5. Repeater graduate. A student who finishes a degree course beyond the prescribed curriculum years.

6. Cohort. The total number of college students entering together as first-time enrollees in a given year and expected to finish together in a later year.

7. Dropout rate. The number of students who quit school during the academic year under study, expressed as the proportion of the total enrollment in that year.

Organization of the Dissertation

This report has five chapters. Chapter I is the introduction which includes the setting, the problem, need for the study, purposes, scope and limitations and definition of terms. Chapter II provides a review of related literature, Chapter III deals with the method of collecting data and

treatment of data. Chapter IV presents the results of the study, and Chapter V contains a summary, conclusions, and recommendations arising from the study.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

A synthesis of significant findings of reported studies about college dropout and repetition is presented here as background for the present study. The chapter is divided into five sections: (1) introduction; (2) college dropout and repetition and educational wastage; (3) characteristics of college dropouts and repeaters; (4) perceptions of college dropouts and repeaters about their experiences in higher education; and (5) related studies carried out in Venezuela and other developing countries.

The literature reveals many studies and reviews regarding the problem of dropout and repetition or academic failure. Summerskill (1962, p. 630) reviews studies citing attrition rates in American colleges and universities as early as 1913. In 1933, a study by Stagner (pp. 648-660) concerning prediction of students' academic achievement appeared in the literature. Thus, at least forty-five years have been spent to date in studying student dropout and related problems.

The dropout problem has been investigated in relation to many different variables, ranging from personality to environment. Many approaches and procedures have been tried in studying the problem. Some of them involve personality tests, surveys, and exit interviews; others are developmental procedures, such as constructing theoretical models or paradigms or prediction scales. Considering the educational and economic implications of the problem, this sustained interest in research seems appropriate.

College Dropouts and Repeaters and Economic Wastage

This section is organized into: (a) dropout at the college level; (b) repetition at the college level; and (c) economic wastage.

Dropout at the College Level

Definition. The word "dropout" has often been used synonymously with such words as withdrawal, attrition, mortality loss and wastage. While the present study concerns itself with withdrawal from college at any time within the prescribed period of study, others suggest classification of the variable into different categories. For instance, Rose and Elton (1966, p. 242) commented that a withdrawal made during the first semester of matriculation should be distinguished from one made after, and one made during the first school year, from the next. Further distinction

should be made between those who withdrew with passing grades and those with failing ones, according to the same authors. Tinto (1975, pp. 89-90) suggested further differentiation should be made between those dropouts who quit college completely and those who withdrew only temporarily.

A follow-up study made by Jex and Merrill (1962, pp. 764-765) on 266 entering freshmen at the University of Utah in 1950 clearly illustrates an advantage of categorizing withdrawals. Among 79 identified dropouts, it was learned that 23 had transferred to other universities. In another of the follow-up studies, 156 entering engineering freshmen at the same university in 1948 showed 114 (73.07%) graduates distributed in a span of 11 years. From this group, 53 (33.97%) graduated on schedule, (38 or 24.36% in engineering, 14 or 8.97% in other colleges, both in the University of Utah; and 1 or 0.64% in another university). The rest, 61 or 39.10 per cent completed engineering or other degrees in the same or in other universities. Thus, in this case, those who transferred to other colleges in the same university or to other universities, and those who were delayed in graduating may have been included in the withdrawal group. One advantage, therefore, in making categories of withdrawals is that confusion created by lumping together students who have completely stopped with temporary withdrawals and transferees is avoided. One way to avoid such pitfalls is to use long-range follow-up studies. The major drawback in this kind of study, however, is that

it is expensive.

Dropout rate. Dropout rate is defined as the number of students who quit school during the academic year, expressed as the proportion of the total enrollment in that year. Several studies in the literature have been concerned with estimating dropout rates both state- and nationwide.

Differing dropout rates have been reported for various universities. One of the highest dropout rates (67%) was found in the University of New Mexico (Goetz & Leach, 1967, p. 883). In the University of Indiana, according to Koelsche (1956, p. 358), out of 2,091 entering freshmen in 1948, 1,233 or 59 per cent dropped out at certain times in four years. Knoell (1960, p. 54) cited a study in the University of Iowa where the dropout rate of the entering freshmen in 1955 was 41.8 per cent.

A nationwide study of dropout and retention considered by authorities in the field as classic was accomplished by Iffert (1957, pp. 15-20). His study involved 12,667 entering freshmen enrolled in 147 public and private institutions of higher education in 1950. To obtain more accurate data he used two sources of information: school records and responses obtained from a questionnaire. Among his findings were:

1. Publicly controlled institutions had a higher dropout rate, 56.2 per cent, than the privately controlled which had 42.6 per cent. Both data were obtained from the school

records; no data from respondents were available.

2. Teachers colleges had the highest dropout rate from both sources: 56.1 per cent from school records and 44.1 per cent from respondents.

3. Compared to teachers colleges, the dropout rate in universities was lower: 47.5 per cent from school records and 42.7 per cent from respondents. Special mention of teachers colleges and universities excluding other types of institutions studied by Iffert is made here because the former is the focus of the present study and the latter has been used for comparison purposes.

4. The mean dropout rate was 48.3 per cent in three years, according to the school records, while it was 41.5 per cent in four years, according to respondents. The discrepancy can perhaps be explained by a difference in number of years being considered, three from school records and four from respondents. Also, there were 10.3 per cent transferees included in the respondents' source.

5. The distribution of dropout rates in three years was 27.3 per cent for the combined two semesters of the first year, and 21.7 per cent for the combined second and third years. These data were obtained from the school records only.

It may be noted that the combined dropout rates for two semesters during the first year in Iffert's study is as much if not greater than the combined dropout rates for both second and third years. This trend has been supported by

several studies. One study was reported by Gekoski and Schwartz (1961, pp. 192-194) on 816 entering freshmen from three different colleges at Temple University: Liberal Arts, Teachers College and School of Business and Public Administration. The authors made the following observations:

> Of this group 262 or 32% did not register the following September. One-half year later an additional 8% dropped out. This represents a 40% loss in one and a half years with 2/3 of the loss coming in the first year.

Another study was a review on dropout studies made by Marsh (1966, p. 476) in which, after enumerating data which indicated a large percentage of attrition in the first year, he concluded that the most crucial dropout period is the first year; the chances for survival increasing to 65 per cent or better by the junior year.

The mean loss of college students in four years in the United States from 1913 to 1960 was 59 per cent, according to Summerskill (1962, p. 630). He computed this mean from 35 different studies done during that period. He also came up with the following dropout rates for every ten-year period: 1920's, 53 per cent; 1930's, 50 per cent; 1940's, 49 per cent; and 1950's, 51 per cent.

Summerskill (1962, p. 631) summed up the extent of dropouts in the United States as follows:

> . . . American colleges lose, on the average, approximately half their students in the four years of matriculation. Some 40% of college students graduate on schedule and, in addition approximately 20% graduate at some college, some day. These have been the facts for several decades in American higher education.

Thus, on the whole, the nationally accepted dropout rate in the United States is 50 per cent. While this norm has already been established, the case of repetition rate remains problematic.

Repetition at the College Level

A review of the literature shows information about college repetition to be meager. A majority of the studies on repetition deal with primary, elementary and secondary levels. In many studies where college students were studied, repetition was only a minute part among the many variables being examined, with dropout as the main problem.

Definition. Words such as retention, non-promotion, academic failure or retardation seem often associated with repetition. In this study, repetition is defined as the act of college students retaking one or more courses resulting in failure to graduate within the prescribed curriculum years.

As far as the literature is concerned, ascertaining repetition rate using the definition given in the present study has not yet been attempted. Attempts to determine students who did not graduate on schedule have been made rarely. It is implied that students failing in some courses and re-enrolling in them belong to those classified as not graduating on schedule just as much as those students who did not fail academically nor retake courses, but who were

delayed in graduating for other reasons. One such reason could be that one merely reduced his credit-hour load, perhaps to spend more time working for a living; or he stopped for a while and then resumed studies after a semester or a year. In the absence of studies on repetition, the question of students who fail to graduate on time, and who still re-enroll in college shall be dealt with below.

Students who do not graduate on schedule but who re-enroll in college. Some studies include in part the problem of students who fail to graduate from college on schedule. McNeely (1931, pp. 8-17) reported 6.3 per cent of students belonging to this group in his classic study of 10,972 entering freshmen in 1931. After following this small group of students for a year, he found that 64.8 per cent finally graduated after their fifth year. The rest, 35.2 per cent, who were premedical, dental or pre-law students had to stay for two more years within the university.

Iffert's study (1957, p. 16), mentioned previously, indicates 7.3 per cent of students who failed to graduate on schedule out of a total of 12,667 entering freshmen in 1950, about 19 years after McNeely's study. Iffert's data were taken from school records. A higher percentage (11.2), however, was obtained by the same author from the responses of the students. This high percentage, according to him, was due to the presence of 500 (4%) seniors with engineering majors, 125 (1%) in medicine, and 40 (0.3%) in law, making a total of 5.3 per cent of students who ought to have

completed a degree in four years for valid reasons (Iffert, 1957, pp. 18-19).

Iffert reported further that according to type of institution, teachers colleges had the lowest percentage (4.2%) of students who failed to complete a degree in four years. It may be worth noting that while teachers colleges had the lowest percentage of students who failed to graduate on schedule, they had the highest dropout rate from among the four types of institutions (liberal arts, "technological", universities and teachers colleges).

The last presented here is the study made by Jex and Merrill (1962, p. 766) on 1,643 entering freshmen in the Fall of 1948. A follow-up was made on these freshmen for 11 years, perhaps the longest period of time spent for this type of study. Among the findings were: about 352 (21.4%) graduated on time; 390 (23.7%) graduated at some time within nine years after the prescribed schedule for completion; of 34.2 per cent women who graduated, only 28.7 per cent completed in four years and only 5.5 per cent did so after four years; and of 51.9 per cent men who graduated, 27.1 per cent did so on time while 24.8 per cent graduated later. As a precautionary measure the same authors had this to say:

> If we may assume a transfer rate of 12 per cent (the estimated natural average) and further assume that about 40 per cent of these transfers have since graduated from other universities . . . the total graduating to date approximates 50 per cent. Since most of our past thinking of graduation rates has been in terms of those graduating on schedule, we have been only 'half-right' concerning the 'long run' (Jex & Merrill, 1962, p. 764).

Thus, there is a great need for long-range follow-up studies to view the problem of repetition and dropout in better perspective. Once the problem is accurately assessed and better understood, there is a greater possibility that appropriate measures may be formulated to reduce educational wastage at least to a minimum level.

Educational Wastage

There has been an increasing concern about educational wastage among educators and administrators in many countries, both industrialized and developing (Arianayagam, 1970, p. 13). In the United States, where investment in education has been increasing, this concern is exhibited by growing public demand for schools to be held accountable (National Commission on the Financing of Post-Secondary Education, 1973, p. 43). The educational wastage referred to here is what Brimer and Pauli (1971, p. 9) mentioned as the inability of the school to hold its students. These are the students who dropped out from college.

Indices considered useful in analyzing educational wastage due to dropout and repetition are discussed below.

Instructional cost. This includes expenditures of students, parents, college and other sponsoring private agencies which hlep finance college instruction. Instructional cost is relative to the quality of education desired and available resources of the country.

According to Thackery (1975, pp. 415-419) estimating instructional cost per college student and determining the portions to be paid by the college and the student, respectively, is difficult because of the practice in the United States to allocate national educational budget in "broad and general" categories.

Based on the National Commission of Financing Post-Secondary Education (1973, p. 254) the following estimates for instructional cost "per additional" college student in 1970-71 were as follows: $1,501 for the first two years in public institutions and $2,163 for private "per additional" student; $2,300 in public and $3,029 in private institutions "per additional" student at the upper level. It is estimated that about one-third of the instructional cost per college student is paid by the student in the form of tuition fees (Carnegie Commission on Higher Education, 1973, p. 10).

The instructional cost that is wasted due to early withdrawal of a student in college is estimated to be $1,000, according to Davis (1972, p. 479). This amount includes $500 spent by the college for "recruiting, screening, accepting, registering, indoctrinating, counseling and fitting (a student) into college life"; and another $500 paid by the student in the form of tuition fees. These estimates, however, were cited as U.S. costs and, therefore, not necessarily the same as in other countries.

Potential services. These include some of the "indirect costs" that Webb (1976, p. 209) reported such as the

foregone income and tax revenues from the foregone income. Specifically, the foregone income here refers to deferred earnings of repeaters and minimum, if not total income loss.

According to Webb (1976, p. 209) foregone income is by far the largest source, having been estimated to account for "over two-thirds" of the total cost of education. Cohn (1977, p. 71), however, thinks otherwise, saying that this source is insignificant, and that caution should be exercised in making such estimates because the structure of wages and earnings could suddenly change, making the present foregone income estimate unrealistic.

Other items included under this category are more difficult to quantify. For instance, the inability of the school to produce needed manpower should have an adverse effect not only upon the agency which needs the manpower but also upon those others that might benefit from such manpower if it were available. Also, the potential student displaced by the dropout might not be admitted elsewhere.

While estimating instructional cost and other factors related to educational wastage is indeed difficult, Webb's suggestion (1976, pp. 213-214) to try to quantify such variables seems encouraging. This is the "cost-benefit analysis" which includes educational wastage. In essence, the technique uses such terms as "profit, product, unit costs, selling price and scrap". "Scrap" refers to educational wastage, dropouts, repeaters, and the like.

Characteristics of College Dropouts and Repeaters

Various characteristics of college dropouts and repeaters are discussed below under the following subtopics: personality characteristics, family background and socio-economic factors, and academic factors.

Personality Characteristics

Three variables in relation to dropout and repetition are included here, and they are age, sex, and personality traits. The first to be discussed is age.

Age. Several studies have indicated that age has little or no relationship to dropout or academic failure. However, there are certain qualifications made by Chase (1970, pp. 67-68) in this area based on his report about dropout at Indiana University:

> Dropouts in the first semester were underrepresented among older (20 years and up) freshmen. However, even though older students seemed to persist through their initial encounter with college, they tended to be less likely to persist through the entire four years of undergraduate work. By the close of the junior year the students who had withdrawn were overrepresented among the "older" age levels for both males and females. It appears that "older" students have the independence to make the original transition to the university, but they also leave in larger proportions than expected during the early years of their higher education.

Sexton (1965, pp. 305-306) confirmed the above contention when she reached the following conclusions: "Generally speaking, however, students who enter college at normal age

or a year younger tended to do the best work." She goes on to say: "The reverse is true of students who enter a year or two later." On the whole however, she said that "age is not directly related to continuous academic failure or dropping out." Summerskill (1962, p. 631), as cited earlier, made a similar contention when he said: "Age per se does not affect attrition, although older undergraduates may encounter more obstacles to graduation."

Apparently, the issue over age and dropout has already been resolved. This is evidenced by the decreasing interest about the subject in currect research. In fact, in some prediction scales, like that developed by Boshier (1972, pp. 87-91), age is no longer a part of the composite of predictive criteria.

Sex. Pentages and Creedon (1978, p. 57), in their review on dropout studies from 1950 to 1975, concluded that sex is not a significant variable in determining college persistence or attrition. Summerskill (1962, pp. 631-632) also gave a similar conclusion based on his review in 1962. Individual studies, however, reported diverse findings. Astin's (1972, pp. 14,35) study on dropouts in 217 institutions in the United States in 1972 revealed that women had a higher dropout rate than men. Support of this finding came from his previous study (Astin, 1964, p. 221). McNeely's study (1938, pp. 13-17) also showed a significant difference in dropout rate between the sexes, but with more

men dropping out than women. Iffert's study (1957, p. 19), however, indicated no significant difference on dropouts between the sexes. Slocum (1956, p. 58) also reported a similar finding.

Personality traits. Heilbrun (1965, p. 2) studied the "value-conformity" dimension of dropouts identified from 2,149 entering freshmen at the University of Iowa in 1961. Three groups of dropouts were identified: those of high-, moderate- and low-ability ratings. The conformity dimensions measured were deference, succorance, and abasement. The non-conformity ones were autonomy, exhibition, dominance and aggression. Task relevant behaviors which represented specific conformity to academic values were also measured. These were achievement, order, endurance, and change. The hypothesis was stated in a question form and is quoted here:

> . . . Do first-year college students whose personological makeup predisposes them to conform to the academic and social values of the institution make a better adjustment than students for whom the opposite is the case when college dropout is used as the criterion of adjustment (Heilbrun, 1965, p. 2)?

Among the three identified groups of dropouts, only the high-ability supported the above hypothesis, i.e. the high-ability dropouts were found more assertive and less passive. A difference between male and female responses existed, however. Only four of the seven criteria in the first set given above were found true for males and only six for females (Heilbrun, 1965).

Another personality study, reported by Grace (1957, p. 37) concerns variables of anxiety, independence and responsibility. He tested two hypotheses: independent-responsible students would be least likely to drop out of college; dependent-irresponsible students most likely will leave college. Using the Minnesota Multiphasic Personality Inventory (MMPI) and The Taylor Manifest Anxiety Scale, he found:

> Attrition increases as anxiety increases in the order: independent-responsible, independent or responsible, independent-irresponsible or dependent-responsible, dependent, or irresponsible, and dependent-irresponsible (Grace, 1957, p. 49).

Using another personality measure, the Minnesota Counseling Inventory (MCI), Brown (1960, p. 280) investigated the relationship between scores on the MCI and persistence in college. He compared the scores on the MCI of students who dropped out of college during the first semester with the scores of the typical freshmen in three liberal arts colleges. He found that "male dropouts tended to be irresponsible and non-conforming, while the typical female dropout was withdrawn and depressed" (Brown, 1960, p. 282).

Continuous exploration on personality dimensions in relation to college persistence has been encouraged by Marsh (1966, p. 480). He particularly refers to interest, motivation, expectation, and other personality traits that may have some bearing on persistence of students in college. In fact, Summerskill (1962, p. 637) reported that "the largest number of dropouts involve motivational forces--goals, interest, and satisfaction related to college and other facets

of student's life. A study by Hackman and Dysinger (1970, p. 315) on commitment with a total sample of 1,407 students in three midwestern colleges at the beginning of the academic year 1964-65 revealed:

> The commitment of a student and his parent to obtaining a college education--as measured before enrollment in college--significantly relate to whether or not the student persists beyond the freshman year.

Other studies seeking to formulate a theoretical framework to explain dropout and academic failure now include the variable "commitment" (Tinto, 1975, p. 95; Spady, 1971, p. 39).

Family Background and Socio-Economic Factors

Specifically, parents' education and occupation and their influence on their children's persistence in college are treated here. Also discussed are income of the family and that of the student.

Family influence. The influence of antecedental factors has been extensively investigated in relation to college persistence, dropout, and academic failure yet, according to Summerskill (1962, p. 632), the findings are still "equivocal". Slocum (1956, p. 57), cited earlier, reported the relationship of education and occupation of parents to college survival as follows:

> . . . Generally, the higher the educational level of the parents, the higher the probability of survival. Also, a significantly higher survival rate was noted for students whose fathers were employed in service occupations and as manual laborers. An interesting exception to this was the fact that the very few children of farm laborers and foremen included in the study had a very high survival rate.

In a follow-up study of 6,660 entering freshmen with high aptitude from 1957 to 1962, Astin (1964, p. 223) found that the educational attainment of parents and the occupation of fathers are significantly related to dropout. Four years later, Panos and Astin (1968, p. 63) reported a similar finding, i.e., the education of parents are "predictive" of completion of a degree in college. Bayer's study (1968) of 1,849 college seniors in 1968 indicated that parents' educational level significantly differentiate dropouts, graduates and those students who were delayed in graduating.

While Tinto (1975, pp. 99-100) reported that college persisters are "likely to come from families whose parents are more educated", he viewed it in another perspective. He considers the quality of family relationships and interest and expectations of parents for their children's education as "most important" influencing factors on the child's academic success. In fact, the significance of these variables has already been recognized. According to Sexton (1965), more studies are now focused on parents' instilling values for education of their children rather than on education of parents alone.

Income. Studies on students' finances in relation to college persistence or withdrawal revealed diverse findings. When Bayer (1968), cited earlier, compared the percentages of dropouts, retained students and graduates to parents' income (lower than $600), the results showed no significant difference. Moreover, both dropouts and college persisters indicated that the students' finances were only of "some importance" to them (Goetz & Leach, 1967, p. 884). These findings seem to indicate that neither parents' income nor students' finances make much difference whether a student will persist in college or drop out.

However, in Slocum's study (1956, p. 59) a considerable percentage (39%) of dropouts reported that inadequate finances were either "important or very important" consideration that prompted them to withdraw. Summerskill (1962, p. 647) also reported that of the 21 studies he reviewed finances were rated as one of the "three most important factors in attrition". Astin's recent study (1972, p. 37) reveals interesting findings on the subject: "A student has a better chance of staying in college if he received a major part of his support from his parents, from a scholarship, or from personal savings." Whereas a student who is employed is "less likely to persist".

Probably, the diversity in findings above may be explained by availability of scholarship funds, loans, work-study programs and other forms of student financial aid. According to Summerskill (1962, p. 647), these variables, in

addition to variation in costs of attending college, interfere with results of study on income and dropout.

Academic Factors

Included in the discussion below are high school background and academic performance in college.

High school background. Among the academic indicators from high school source are: (1) aptitude tests such as Scholastic Aptitude Test (SAT) and the American Council on Education Psychological Test (ACE); (2) academic rank in a graduating class; and (3) high school grades.

Aptitude tests. Several studies show significant relationship between SAT scores and college persistence, i.e., the higher the ability scores on SAT, the greater the possibility of college persistence (Summerskill, 1962, p. 635; Chase, 1970, p. 67). The American Council on Education Psychological Test has also been a reliable predictor for college persistence or dropout. In Slocum's study (1956, p. 55), the average percentile rank on ACE of college persisters was 73 while that of the dropouts was only 58. Twelve of the 13 studies reviewed by Summerskill (1962, p. 635) indicated a significantly lower ACE scores among dropouts than among college persisters.

However, Waller (1964, pp. 285-287) cautions using aptitude tests alone for admission purposes. He cited a case where 39 per cent of entering freshmen who scored at the

upper half of the American Council on Education Psychological Test dropped out of college.

High school rank. Waller (1964, pp. 283-284) reported that high school rank has often been used alone to predict academic success in college. Its correlation to college performance ranges from 0.47 to 0.60, according to the same author.

Results of several studies show that the greater the high school rank in class of a student, the greater is his possibility to persist in college. Astin's findings (1964, p. 263) illustrate the case in point. He reported that a significantly greater percentage (53.7) of dropouts in his study were found to be at the 94th percentile rank or lower in high school class, and only 20.0 per cent were at the 95th percentile rank or higher. Few cases, however, show exceptions. For instance, Koelsche (1956, p. 360) reported that 25 per cent of the dropouts at Indiana University were at the highest 5th rank in their respective graduating classes. A much lower percentage (14.0) of dropouts were located at the lowest 5th.

One weakness of using high school rank alone in predicting academic success or failure in college, according to Blanchfield (1971, p. 3), is that it tends to be biased. ". . . A good student in stiff competition may have a low rank while a poor student may rank high in a less competitive situation."

High school grades. High school grades constitute a common criterion used to assess a prospective college student. Summerskill (1962, p. 634) reported that high school grades are generally recognized as the best existing predictor of college success. Slocum (1956, p. 55) added that high school grades, together with ACE scores, had a "considerable bearing on scholastic performance in college." Blanchfield (1971, pp. 284-285) reported that the correlation of high school grades to college success ranges from 0.40 to 0.80. Inspite of the high correlation of high school grades to performance in college, the former should be used with other measures to predict college success.

Academic performance in college. The scholastic performance of a dropout is "frequently average" according to Slocum (1956, p. 55). He also said that when students withdrew "low grades" were always an important consideration. He found that 51 per cent of the dropouts withdrew when they had academic difficulty. A similar result was reported by Johnson (1954, p. 386) when he compared first year dropouts and persisters. Among men who dropped out, their grade point averages were lower than those who persisted.

Regarding withdrawal of courses, Koelsche (1956, p. 360) reported the following patterns: 17.2 per cent of the dropouts withdrew from six or more courses. Only five per cent actually failed in six or more courses. According to the same author, there "appeared to be a decided tendency on the part of the withdrawees to avoid repeating a course

which they had once failed." In reporting the percentage distribution of grade point indices, he gave the following:

> . . . the mean was 0.777. Sixty-nine students in the group were doing satisfactory work at the time of withdrawal. Six from the group of 69 had maintained a 'B' average. The other 111 members of the withdrawal group had grade point indices below 1.00, and were therefore doing unsatisfactory work at the time of withdrawal. Represented by percentages, 38.3 per cent were doing satisfactory work and 61.7 per cent were doing unsatisfactory work at the time they left college (Koelsche, 1956, p. 361).

Blanchfield (1971, p. 3) also found that the first semester grades are significantly related to dropping out. As he interestingly puts it: There is nothing like a good beginning to give a student confidence." Tinto's review (1975, p. 104) revealed that grade performance in college is the single most important factor in predicting persistence in college.

Summerskill's summary of findings (1962, p. 636) obtained from his review about the relationship between academic performance in college and withdrawal are presented below:

> 1. In a series of 23 studies the percentage of academic failures among those who dropped out ranged from 3% to 78%, reflecting differences in the policies and standards of colleges and in the composition of student bodies.
>
> 2. The median value was 33%, i.e.; one out of three dropouts occurred for academic reasons.
>
> 3. Academic failure was typically cited as the leading single cause of dropouts or as one of two or three leading causes--depending upon the college studied.
>
> 4. The relationship between grades and attrition appears to be continuous in that the probability

of dropping out varies inversely with grade point averages throughout the whole distribution of grades at a given college.

5. Prediction of dropouts is better at the lower end of the grade scale, i.e., students with poor grades are highly likely to drop out while students with excellent grades may drop out.

6. Poor or failing grades at the beginning of a college career are highly predictive of dropouts.

The majority of the above data were obtained from existing records, interpreted by the investigator and then reported. Other kinds of data are those given by the dropouts or repeaters themselves as they see them.

Perception of College Dropouts and Repeaters about Their Experiences in Higher Education

Student-Environment Interaction

Several studies concerning the measurement of student-environment interaction have been reported. A relatively recent investigation was reported by Netusil and Hallenbeck (1975, pp. 263-266) on student satisfaction about certain factors in the college environment. These same authors were not only interested in assessing student satisfaction of his college environment but also in comparing that level to the one perceived by academic advisors and student affairs staff. Using the College Student Satisfaction Questionnaire (CSSQ) they found that "as a group, academic advisors did not accurately perceive the level of student satisfaction."

Betz et al. (1971) made an analysis of college student satisfaction. They reported that educational quality, social life, student living and working conditions were important dimensions of college student satisfaction. They also suspected that recognition may be an added dimension to it. In identifying the above variables, they also used the same instrument (CSSQ) mentioned above. This instrument had been generally validated by the same authors (Betz et al., 1971).

Pervin's works (1967a, p. 290) on satisfaction (or dissatisfaction) of students in the college environment were among the pioneering ones using the instrument, Transactional Analysis of Personality and Environment (TAPE). In fact, validation of such instrument was first reported in 1967 by the same author. His second work deals with satisfaction of student and the perceived self-environment similarity. He hypothesized:

> Self-college similarity scores should correlate higher with the satisfaction variables for individuals with high discrepancies, whereas the reverse would hold true for the magnitude of the correlations between Ideal Self-College similarity and satisfaction (Pervin, 1967b, p. 625).

His findings strongly supported the above hypothesis.

Another study of Pervin was done with Rubin (Pervin and Rubin, 1967, pp. 285-286) on student dissatisfaction with college and the college dropout. They hypothesized that "the greater the discrepancy between the way a student sees himself and his image of the college, the more chances that he will be dissatisfied with college and consider dropping out." Variables considered in the same study involved

non-academic for the authors predicted that the above hypothesis will only be true to non-academic factors. Their data supported the hypothesis.

Earlier studies focused on an approach without using the transactional technique described above. Astin (1963) did several studies using the Environment Assessment Technique (EAT) instrument. Another was reported by Reiner (1970, pp. 71-73) where he used the College and University Environmental Scale (CUES) developed by Pace, to assess relationships between student's ability and perception of college environment.

Except for Pervin's study (1967a) which was already cited above, the present writer did not find dropout studies which use the TAPE to assess the dropout's satisfaction or dissatisfaction with his experiences in college. Most studies being reviewed used instruments developed by the investigator himself. The review presented here focuses on students' perception of their academic and social climates. The social climate deals with student interaction with his peer group, faculty, counselors, administrators and other significant persons on campus.

Academic Climate and Dropouts and Repeaters

Academic climate includes those experiences of a student relating to curricular offerings, faculty ability to teach, class size and his over-all goal. Cope (1971, pp.

46-47) averred that one of the major "environmental presses" of a student's life is academic. He identified three factors which the student felt were "academic presses": "fear of academic failure", "being placed on probation", and "difficulty in learning habits".

Another situation reported by students, the majority of whom were dropouts and academic failures, was the incongruency of goal expectation of students with curricular offerings. For instance, Gekoski and Schwartz (1961, p. 193) reported that a significant percentage of dropouts and academic failures felt their courses were preparing them "poorly or very poorly" for their vocational goal. In addition, they rated their faculty's ability to teach lower than the majority of the college persisters did. As a whole the majority of the dropouts and academic failures felt that their experiences in college did not fulfill their expectations upon enrollment. Kapur (1972, pp. 367-368) reported a similar finding. A majority of the dropouts and academic failures in his study indicated that they were not happy with their course of study, and the university as a whole. Finally, Holmes' findings (1966, p. 20) included "satisfaction with advisement" and "satisfaction with program of general education" as probable indicators for potential withdrawal.

On the other hand, Slocum (1956, p. 54) found that a majority of the problems perceived by dropouts were also problems felt by most of college persisters. A study

reported by Goetz and Leach (1967, pp. 884-886) also indicated problem situations which many of both student groups experienced. Some of these situations related to academic aspects are enumerated below:

1. Services and facilities of the library are good.

2. Teachers are enthusiastic when they teach class.

3. The university emphasizes intellectual and cultural activities outside the classroom.

4. The university offers a full program of courses pertaining to my major field.

5. The university provides good facilities.

6. The university encourages individual thought and expression.

7. First year classes are too large.

It appears that the findings of studies on the relationship between students' perception and academic climate, dropout and repetition are not yet conclusive. Further research, therefore, on the area with the use of valid and reliable instruments in carefully designed studies may be suggested.

Social Climate and Dropouts and Repeaters

Interaction with peer group. Several studies and reviews supported the contention that a favorable social climate, as perceived by students, influences persistence in college. According to Slocum (1956, p. 61), more than six

out of ten students in his study reported that a favorable relationship with other students contributed much to their adjustment in college. The high survival rate in sororities which was pointed out by the same author, implies the significance of peer group interaction to college persistence. Panos and Astin (1968, p. 66) reported that "students are more likely to complete four years if they attend a college where student-peer relationships are characterized by 'cohesiveness, cooperativeness, and independence.'" Sexton's review (1965, p. 313) also indicated the value of peer group in a student life. She said that oftentimes a student goes to a particular college because his friends are there. She commented, however, that "it is difficult to establish a precise cause-and-effect relationship" regarding social integration through friends.

Pantages and Creedon (1978, p. 77) expressed their view that there is a lack of consistency of findings, in their review of research studies on dropouts published from 1950 to 1975, about peer-group interaction through extracurricular activities. This is also true in studies reviewed by the present writer. For instance, Gekoski and Schwartz (1961, p. 193) revealed valuable information about the significant relationship between extracurricular activities and withdrawal. Sixty three per cent of those students staying in college rated extracurricular activities as "good" or "excellent" while only 42 per cent of the withdrawees did. Also, the remaining students participated in

extracurricular activities to a greater degree than the withdrawing students.

Different from the above finding was the report by Vorreyer (1963, p. 363) which showed no relationship between social adjustment and grade point average and, therefore, the probability of dropping out.

To some extent, extreme social involvement was found to influence poor adademic performance and withdrawal. This was supported by Panos and Astin in their study (1968, p. 66) on the assessment of environment and dropout. They reported that "relatively frequent informal dating" may likely be connected with withdrawal. Perhaps, it is not the dating per se that influences poor academic performance but the time spent while dating may have distracted the student too much from his studies. As Spady (1970, p. 76) has quite aptly stated: "Time spent socializing is time lost studying." The same author concluded, however, that various measures of interpersonal orientations, friendship support and extracurricular involvement are generally associated with staying in college. The foregoing measures may counteract the feeling of alienation which, according to Williams (1967, p. 879), may contribute to student's anxiety and doubt about social adequacy. It is highly probably that uninvolvement, or in this case alienation, may be connected with poor academic performance or withdrawal.

Interaction with faculty. "The quality of the relationship between a student and her or his professor is of crucial importance in determining satisfaction with institution" according to Pantages and Creedon (1978, p. 77). Studies on this area reveal interesting data pointing to one direction--favorable faculty-student interaction fosters persistence in college. Spady (1970, p. 50) suggested that interaction with faculty not only increases social integration but also academic integration. This was supported by Holmes' finding (1966, p. 217) that the student who scores high on student-faculty interaction tends to have better academic performance than the average. According to Panos and Astin (1968, p. 66) "students are less likely to withdraw" if they attend colleges where the classroom environment is characterized by a "high level of personal involvement" on the part of the instructor and the student. They also said that "those colleges which encourage student persistence are seen as showing a good deal of concern for the individual." On the other hand, the same authors stessed that those colleges that seem to foster dropping out are seen by students as having among other things, "a permissive faculty".

Other data further supported the hypothesis that faculty-student interaction has a significant relationship with dropping out. In Slocum's study (1956, p. 61) students were asked whether they were free to talk to their faculty about their personal problems. Fifty-one per cent of the dropouts and 34 per cent of the persisters answered in the negative.

The same author interpreted this situation as creating a barrier between faculty and student, and this barrier was found to be associated with higher probability of withdrawal.

According to Gekoski and Schwartz (1961, p. 193), the persisters were found to be much more aware of campus agencies which might help with student problem than withdrawees. Forty-four per cent of the former received assistance from such agencies while this was true only for 23 per cent of the withdrawing students.

There was very little information regarding dropout and student-administrator interaction. Only one study was found by this writer and this reported that college persisters were more favorable regarding the way administrators take control of extracurricular activities than dropouts (Gekoski & Schwartz, 1961, p. 193).

Most often Stated Reasons for Withdrawal

Academic and social experiences perceived by dropouts to be the reasons for their withdrawal from college were identified in some studies being reviewed by the present writer. Only those reasons which ranked third or higher are discussed here.

The single reason most often given as important or very important by respondents in the study of Slocum (1956, pp. 59-60) was marriage for women or military service for men.

However, Demos' respondents (1968, p. 683) gave "need a job" most frequently as their reason for withdrawal. Military service was ranked second only among the men respondents while marriage was not even mentioned by women. In Astin's study (1964, p. 222) the reasons most often given by students for dropping out were different from those stated above. The male respondents often gave the following reasons: "My grades were unsatisfactory" (first rank); "I was tired of being a student" (second rank); and "Couldn't afford the cost" (third rank). The females mentioned the following: "Couldn't afford the cost" (first rank); "Wanted to devote more time to family" (second rank); and "I was tired of being a student" (third rank).

In a later study, Astin (1975, p. 15) stated that the most frequently mentioned reason for dropping out among men and women are: boredom with courses, financial difficulties, dissatisfaction with requirements or regulations, and change in career goals.

Hence, it may be pointed out that the reasons most frequently stated to have connection with withdrawal vary. This is not surprising for even between student and counselor the reasons given by the former are not oftentimes the true reasons as seen by the counselors, according to Demos (1968, p. 681). For instance, Demos reported that while the most popular reason given by dropouts was "needing a job" that of the counselors was "poor grades". Marsh (1968, p. 478) explained this discrepancy by saying:

> The validity of a reason for dropping out of college might be questionable because of the means by which it must be attained. It is likely that the student being interviewed prior to leaving school is more anxious to terminate the relationship than be concerned with much honest self-evaluation.

It may be noted that recent studies on dropout and academic failure are now directed toward a behavioral analysis. Variables often investigated recently in relation to the problem are personality factors, student satisfaction or congruency of college image. Such sophistication has not yet been attempted in studying dropout problems in developing countries, like Venezuela.

Related Studies Carried Out in Venezuela and Other Developing Countries

The limited literature on dropout and repetition in Venezuela and other developing countries concerns mostly with the primary and elementary levels (UNESCO, 1972, p. 3). Moreover, the emphasis is placed on the extent of the problem, in relation to manpower shortage and economic wastage, rather than on behavioral analysis.

Dropout and Repetition in Venezuela and Other Latin American Countries

Extent. Dropout rate in Venezuela is 90 per cent, according to Arturo Uslar Pietri (1978, p. 18), one of the leading educators and writers in the country. He refers, of course, to total dropout rate in three levels--primary,

secondary and tertiary.

Individual reports on dropout and repetition rates at the college level alone from 1955 to 1970 present a much lower mean than the one given above. Casas Armengol (1972, p. 27) reported that the dropout and repetition rate by cohort in several colleges in Venezuela from 1955 to 1961 ranged from 32 per dent to 72 per cent, increasing from early to recent cohorts. In the Instituto Pedagogico Experimental de Barquisimeto alone, the dropout and repetition rate per cohort from 1959 to 1969, ranted from 54.99 per cent to 79.13 per cent, decreasing every three-year period and picking up at the fourth year of each graduating class (Expresion, 1969, p. 13).

Educacion y Adiestramiento (1963, p. 207) reported a lower dropout and repetition rate (46.9%) in universities than in teachers colleges (65.4%) in 1962. For freshmen alone, the dropout rate at the University of Oriente in 1970 was 40 per cent (Burroughs, 1974, pp. 100-102). Based on the report in Expresion (1969, p. 15) the dropout rate by year in several teachers colleges from 1960 to 1964 ranged from 34.7 per cent to 11.7 per cent. Just as in the United States, the highest dropout rate in this particular study was in the first year. Unlike in the United States, the lowest dropout rate was zero, occurring in the second and third years during the cohorts 1960 and 1961, respectively (Expresion, 1969, p. 13).

Dropout and repetition rates in other Latin American countries were based on the reports about promotion flows. According to Castañeda (1975, p. 58), the promotion flow in Guatemala in 1969 was: starting with 100 students at the elementary, only 20 would finish in that level; 14 would enroll in the high school, and only four would graduate; two would enroll in college, and only 0.2 would complete a degree.

From the above flow, it is interpolated that there would be 80 per cent dropouts and repeaters in the elementary level, 71.42 per cent in the high school, and 90 per cent in college based on total of each level. There is also a 99.8 per cent dropout and repetition rate in college level based on 100 starting enrollees at the elementary level.

In Brazil in 1969, Cummings and Lemke (1973, p. 35) report: "Of 100 students who begin primary schools, 66 finish in the fifth year, 16 graduate from high school, and seven finish in the university." While it is not possible to deduce percentages of dropouts and repeaters within levels, they could be obtained between levels. Thus, based on this flow, there is a student loss of 56.25 per cent between high school and college graduates. Or there is a 93 per cent student loss and repetition based on the initial 100 students.

The foregoing reports have some weaknesses. One is that the percentages for dropout and repetition were not

determined separately. Also, the time of withdrawal was not noted. However, the data seem adequate to illustrate the extent of dropout and repetition in Venezuela and other developing countries.

Stated reasons for college withdrawal. Only one study among those reviewed reported reasons why students withdraw from college. Translated by the present writer, the reasons given were: illness, financial difficulty, low grades, mobility, faulty schedule of classes, has to work, family problems, transfer, legal problem, and reasons beyond the control of the student. The most frequent reason given was low grades (Expresion, 1969, p. 13).

Educational Cost

It was reported by Schiefelbein (1975, p. 468) that Latin America has been spending yearly 200 million U.S. dollars for repeaters. Such amount may be more if one includes the indirect cost which was discussed earlier. Computing for indirect cost is quite difficult as UNESCO (1972, p. 30) points out because of lack of data available for such purpose. Another information usually not available, and therefore sometimes not included in reporting educational cost, according to the same report, are funds from the private sector for educational purposes.

In the Asian Region, the cost of education from 1960 to 1968 ranged from one per cent to 25 per cent of the nation's

total income, according to UNESCO (1972, p. 31). The same report also stated that the increased annual average of education cost for the whole region was 7.2 per cent.

The estimates of educational cost for the Asian Region were based primarily on unit cost calculation. In the UNESCO (1972, p. 75) estimates, unit cost refers only to items that are "minimally essentially for, and directed to instructional work". They do not include auxilliary and welfare services such as school meals, school uniforms, transportation, teacher's housing and others. They also do not include the cost of boarding, clothing and accommodations which are borne by the family. Furthermore, the opportunity cost "representing the estimated loss of income from foregone employment opportunities or, in case of capital costs, from not devoting these resources to alternative investment projects" are not also included.

There are two parts of the unit cost of instruction: the capital cost per student-place and the recurring cost per student (UNESCO, 1972, p. 84). Capital cost includes the building cost per square meter, area per student-place in square meters, net building cost per student-place, site cost, and furniture and equipment. Capital cost is constant for a ten-year period (1970-1980). The recurring cost includes (a) average annual salary of teachers, (b) pupil-teacher ratio, and (c) proportion of teacher salaries to total recurring costs (UNESCO, 1972, p. 74).

It has been estimated that for the total educational costs, 20 per cent will be used by the tertiary level, and 40 per cent for each of the first and second levels (UNESCO, 1972, p. 31). Capital cost is smaller in value than recurring cost. According to a UNESCO report in 1972, the world average ratios were 14.8 per cent for capital investment and 85.2 per cent for recurring expenditures (UNESCO, 1970, p. 58). It was also reported that among developed countries capital expeditures were usually bigger than among developing countries.

A comparison of unit instructional cost among some developing countries, including Venezuela, is presented below. It was projected that recurring cost per student in the Asian Region by 1980 will be $427 for the Sciences and $183 for the Arts. The projected capital expenditures for the Sciences will be $2,080 and for the Arts, $660 (UNESCO, 1972, p. 83).

Data about estimates for unit instructional costs for the entire area of Latin America were not available in the literature surveyed. However, some countries from this region have data on instructional costs. Peru's direct unit cost for teacher education was reported to be $644.61 (Paulston, 1971, p. 205). Argentina's recurring unit cost in 1968 was $378; Chile had $979; Colombia had $863 (UNESCO, 1970, p. 63). Venezuela, where students who are enrolled in autonomous universities do not pay tuition fees, had an appropriation from the Ministry of Education equivalent to

$2,025 for unit instructional cost in 1976 (International Encyclopedia of Higher Education, 1977, p. 4331).

Comparison of instructional costs per unit for the above countries, however, should not be resorted to, because of the difference of time reference in some, particularly Venezuela. Certainly, money value within countries and dollar exchange rates have tremendously changed during the past few years.

Summary

The problems of dropout and poor academic performance have been studied extensively in the United States for at least 45 years. Yet, in spite of the large bulk of knowledge on the subject, confusion still arises, particularly in the use of the term dropout. There is very little research done to identify students who fail and then repeat a course or courses. A majority of the studies used a cross-sectional approach, with few relying upon longitudinal methods, hence, they fail to resolve such issues.

In developing countries like Venezuela, studies on dropout and repetition at the tertiary level is scarce. Most of the reports concern only on the extent of the problem in relation to manpower needs and economic wastage, rather than at the micro-level.

The established norm of college dropout in the United States is 50 per cent. While there is no norm for dropout rate in Venezuela, reports indicate a range of 32 per cent

to 79.13 per cent in four years in college, and 11.7 per cent to 40 per cent in one year, with freshmen having the highest percentage.

While low grades are found to be a strong predictor for college widthdrawal, results tend to show that there is no single factor, but rather a composite of related factors which have a strong influence on dropping out from college. Personality variables such as goals, commitment, responsibility and student environment interaction may be included as part of the composite factors.

Dropout and repetition and economic wastage studies are scarce in Venezuela. There seems to be difficulty in assigning instruction cost per college student based on uniform budget items, hence there is difficulty in comparing instruction cost per student in one country with another. However, the trend is for developed countries to spend more in capital investments and less on recurring expenses, while the reverse is true among developing countries.

CHAPTER III

THE VENEZUELAN TEACHERS COLLEGES AND THE METHODS OF RESEARCH

Nature of the Teachers Colleges

The Venezuelan teachers colleges are institutions of higher education offering four-year degree courses. These colleges are under the direct control of the Ministry of Education. Although there is a vigorous private education in Venezuela the State reserves the right to educate its teachers, public and private. Most of the Venezuelan college students belong to the lower or medium socio-economic class (Instituto Pedagogico Experimental de Maturin, 1973, p. 50) with easy access to these colleges because of the policy of open admission and few entrance limitations as mandated by the Education Law. In contrast, the universities have longer professional degree courses--five or six years--and at least one of them requires an entrance examination related to academic achievement in high school.

Although there are now six Venezuelan teachers colleges only four were studied since only this number existed at the time of this study. The other two were founded later in 1976-77 and therefore could not be included in this study.

The Role of the Teachers Colleges

The main function of the Venezuelan teachers colleges is to train teachers for the secondary schools. However, a substantial number of their graduates teach at their alma maters and also at the other university colleges and polytechnic institutes all over the country. This diversion of teachers from the secondary schools will continue until there are sufficient teachers with suitable background and training in the other schools. Presently, the need for secondary teachers in Venezuela is acute. Seventy per cent of those currently teaching in high school have no teacher's certificate. In the Education Sector of the Fifth Economic Plan of the Nation for 1976 to 1980 in Venezuela, it was stated that "for 1980 15,154 new secondary school teachers will be needed to meet an over-all increment of 258,148 students" (Ministerio de Educacion, 1976, p. 54). However, the teachers colleges are not the only institutions training secondary school teachers. Most of the universities in the country, public or private, have schools of education where students are prepared to teach either in the secondary school system or in college.

Location of the Specific Colleges Under Study

The colleges chosen for study are distributed from East to West along the northern part of Venezuela (Figure 1). This part of the country is the most populous, having been

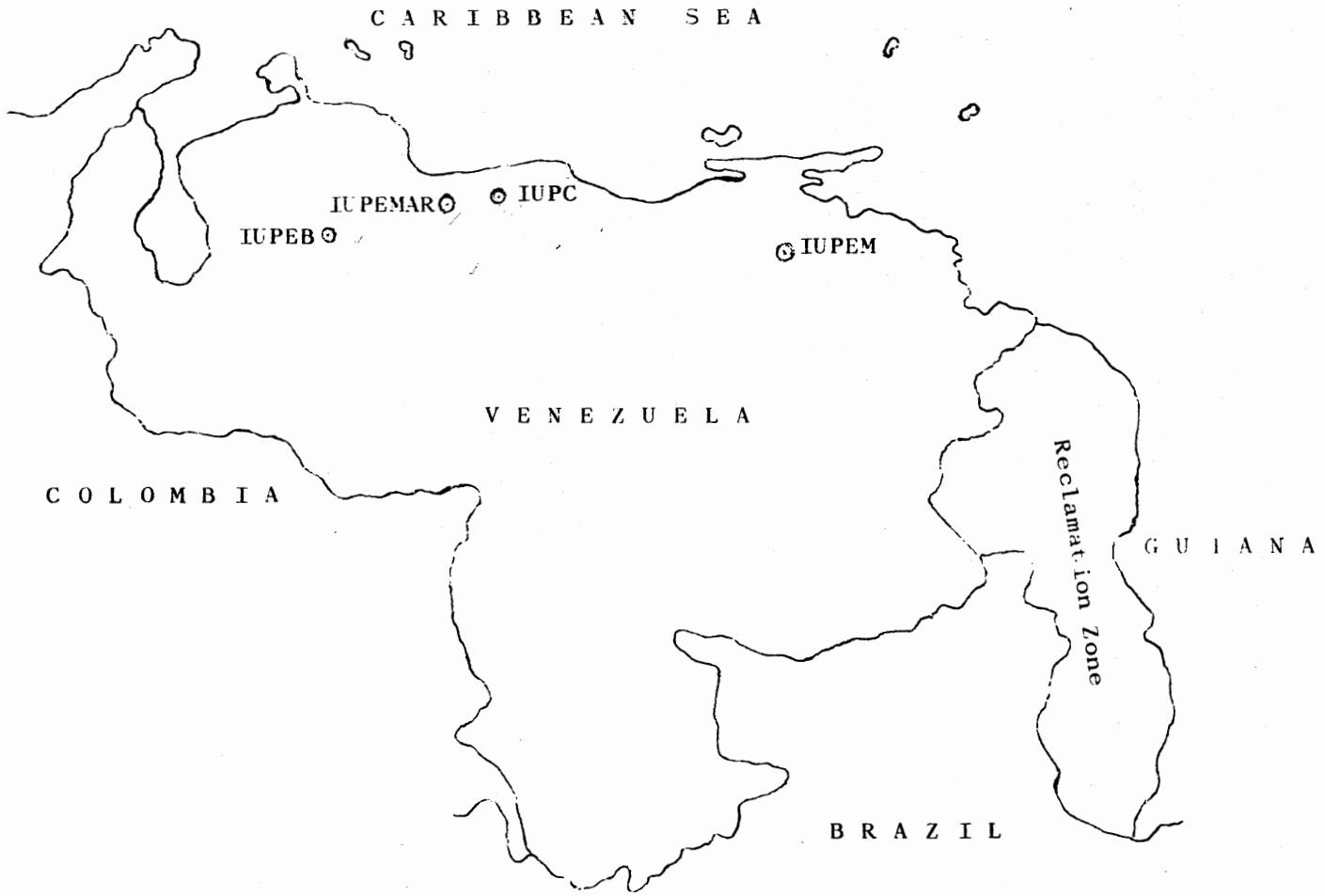

Figure 1. Locations of the Four Teachers Colleges in Venezuela

inhabited first. The colleges are: (1) Instituto Universitario Pedagogico de Caracas (IUPC); (2) Instituto Universitario Pedagogico Experimental de Barquisimeto (IUPEB); (3) Instituto Universitario Pedagogico Experimental de Maracay (IUPEMAR); and (4) Instituto Universitario Pedagogico Experimental de Maturin (IUPEM). Henceforth, these colleges may be referred to by their abbreviations or by location designation such as Caracas Teachers College, Barquisimeto Teachers College, and so on.

Methods of Investigation

The study is mainly descriptive in character. Therefore, the survey method of gathering information was employed. In addition, inferential methods were used to determine differences between the responses of dropouts and repeaters to the items in the questionnaires. Cost computation was based on the population and annual appropriations of the colleges.

Instrumentation

No particular instrument was used to find the number of graduates, dropouts and repeaters as well as their related costs. To evaluate the perceptions of dropouts and repeaters about their college life two kinds of survey questionnaires were used--one for dropouts and one for repeaters. The one for dropouts is in Appendix A while that of repeaters is in Appendix B. These questionnaires were adopted

from the one developed by the Western Interstate Commission for Higher Education (WICHE) of the United States (Bower and Myers, 1976, pp. 49-56, Appendix C) with modifications to suit to conditions in Venezuela. The letter requesting permission to use the instrument is in Appendix D. The main items included in both questionnaires are enumerated below.

1. Demographic background of the students.

2. Status of student's life and activities in college before leaving school or repeating courses.

3. Checklist of perceived reasons for leaving school or repeating courses.

4. A checklist of questions about the degree of satisfaction of dropouts and repeaters with significant features of their institutions.

5. Current and future plans and activities of the students who dropped out and repeated courses.

Modifications on the WICHE Questionnaire for Dropouts

The modifications on the WICHE questionnaire for those who left school deal with the following items:

1. Month/year on question 1, referring to the date of administering the questionnaire was deleted.

2. Zip code was deleted since it is not applicable to Venezuela.

3. Questions 6-10, referring to civil rights, marital status, veteran and brief description of their departure from school, were deleted.

4. Question 11 was eliminated since the students of teachers colleges in Venezuela work for only one degree--a baccalaureate degree called Professor of Secondary Education.

5. Question 6 of the questionnaire in Appendix A was added to the WICHE questionnaire.

6. Question 14 in the original questionnaire was modified by question 9 in the new one.

7. Question 17 was modified to get only four responses instead of six.

8. Questions 19 and 20 were deleted.

9. From question 22 were deleted the following: (4) needed a temporary break from school; (5) major or courses not available at this school; (6) unsure of major and needed to leave school to decide on possible careers; (7) course not challenging; (8) learned what I came to learn; (11) accepted a job and didn't need more school; (12) went into military service; (17) child care not available or too costly; (18) this school is too expensive; (22) personal problems; and (23) fulfilled my personal goals in schooling.

The following items were added to the new questionnaire: (5) teachers college not relevant to my goals; (6) universities give more prestige than teachers colleges; (9) I wanted to go to work; and (13) financial aid was terminated.

10. These items were deleted from question 23: (4) employment opportunities; (5) financial aid opportunities; (6) cost of attending this school; (13) religious environment; (22) relevance of your major field to your career goals; and (25) the school in general.

The following were added to the new questionnaire: (20) quality of the teachers; (21) quality of the

administrators; and (22) quality of the teachers in the teachers college in general.

11. Question 24 in the original was deleted.

12. From question 25 the following items were deleted: (2) entered or plans to enter military service and (6) traveling. And then, question 18 was added to the new questionnaire.

Modifications on the WICHE Questionnaire for Repeaters

The following modifications for repeaters on the WICHE questionnaire were made:

1. The first seven questions were taken from the questionnaire for dropouts and in question 7 the word dropout was changed to repeater.

2. Since questions 8-11 in the dropout questionnaire had the same connotations as questions 10-13 in the repeater questionnaire, only slight modifications were made on the wordings.

3. Question 12 was added to the new questionnaire.

4. Question in the repeater questionnaire is similar to question 16 of the one for dropouts. However, in the former, there are only 16 answers instead of 19 in the latter.

5. In the repeater questionnaire, question 14 corresponds to question 17 of that for dropouts.

6. Questions 18 and 19 in the dropout questionnaire were not included in the one for the repeaters.

After the questionnaires had been prepared, the sample

sizes in each college to be studied were determined. This was necessary in order to know the number of copies of the questionnaires to be printed for the respondents.

Sampling Procedure and Sample Size

Population and Sampling Technique

The respondents in the study came from the populations of dropouts and repeaters in each teachers college. To obtain representative samples, a quasi-random sampling technique was employed. Thus, at IUPC each fortieth and twentieth name in the list for repeaters and dropouts, respectively, was included in the samples for these two populations. At IUPEB, there were fewer dropouts than repeaters, hence every tenth name in the list of dropouts and fortieth in the repeaters' list were chosen as prospective interviewees in this study. At IUPEMAR, each tenth name for dropouts and fiftieth for repeaters were included. In IUPEM the fifth and tenth names were chose from the lists of dropouts and repeaters, respectively. The population, sample sizes and percentages of subjects interviewed are shown in Tables I and II.

Number of Subjects Contacted in the Sample

Considerable difficulties were encountered by the investigator in contacting the subjects. Many of them changed or had incomplete addresses. Consequently, not all of the

subjects in the samples could be interviewed. This reduction in number of respondents imposes limitations on the interpretation of the results. These restrictions are stated in more detail in Chapter V. Table II provides enumeration of the populations, subpopulations, samples and respondents.

TABLE I

POPULATIONS OF THE FOUR TEACHERS COLLEGES BY COHORTS

Teachers College	Cohort 1970-74	Cohort 1971-75	Cohort 1972-76	Total
IUPC	1,070	1,632	1,554	4,256
IUPEB	539	922	1,368	2,829
IUPEMAR	-	-	608	608
IUPEM	-	-	488	488
Total	1,609	2,554	4,018	8,181

Gathering the Data

This writer obtained a letter from the Vice-President for Academic Affairs at Oklahoma State University to the Vice Minister of Education in Venezuela. The letter, found in Appendix D, requested permission and help for the investigator to collect the data needed in the study from the institutions concerned. With this letter, the writer went to Venezuela to gather the data in June to August, 1977.

TABLE II

NUMBER OF DROPOUTS AND REPEATERS, SAMPLE SIZES, NUMBER INTERVIEWED IN SAMPLES AND THEIR RELATIVE PERCENTAGES IN EACH COLLEGE

Teachers College	Dropouts						Repeaters					
	Sample			No. Interviewed			Sample			No. Interviewed		
	No. of Dropouts	% of Sample Size	% of Total	No.	% of Sample	% of Total	No. of Repeaters	% of Sample Size	% of Total	No.	% of Sample	% of Total
IUPC	1,500	55	3.7	28	50.9	1.9	2,347	47	2.0	32	68.1	1.4
IUPEB	335	32	9.6	24	75.0	7.2	1,520	33	2.2	27	81.8	1.8
IUPEMAR	162	16	9.9	8	50.0	4.9	190	13	6.8	11	84.6	5.8
IUPEM	68	14	20.6	11	78.6	16.2	179	17	9.5	13	76.5	7.3
Total	2,065	117	5.7	71	60.7	3.4	4,236	110	2.6	83	75.5	2.0
Mean	516.3	29.3		17.8			1,059	27.5		20.8		

Information Obtained

To calculate the rates and costs of graduates, dropouts and repeaters, the annual budget and enrollment of each college were taken. The budget was obtained from the budget office of each college, while enrollment, dropouts and repeaters were taken from the registrar's office.

Interviewing the Respondents

The respondents who could be contacted were interviewed individually. The investigator clarifed questions of respondents concerning some items in the questionnaire so that full responses could be obtained.

Treatment of Data

Computing the Rate or Percentage of Graduates, Dropouts and Repeaters

The rates of graduates, dropouts and repeaters were expressed as percentage of the original number of entering freshmen in the cohort. For example, assuming that there are 1,000 enrollees during the school year 1970-71 in the first year of cohort 1970-74: At the end of the curriculum year (1973-74) 200 graduated. The rate or percentage of non-repeater or four-year graduates was therefore 200/1,000 x 100 = 20 per cent. If 20 graduated in the school year 1974-75 from the same cohort, the rate or percentage of five-year repeater graduates in the 1970-74 cohort was

20/1,000 x 100 = 2 per cent.

The rate or percentage of dropouts and repeaters was calculated in the same manner as that of graduates.

Calculating the Cost of Graduates, Dropouts and Repeaters

Cost of graduates. To compute the cost of a graduate, the simple straight-line method was used. This approach was deemed justified on the premise that directly or indirectly every penny of the school budget is spent for the students, inasmuch as without the students the college would not exist. And so, in calculating the cost of non-repeater or four-year graduates, the annual budget of the college for the year was divided by the total enrollment of that year. This gives the cost of one student in that year. The cost of each student in the succeeding years was computed in the same manner. To illustrate, Table III is provided.

TABLE III

CALCULATION OF INDIVIDUAL ANNUAL STUDENT COST BASED ON YEARLY BUDGET AND ENROLLMENT

Cost Items	Academic Year			
	1970-71	1971-72	1972-73	1973-74
Annual budget	$1,500,000	$2,000,000	$2,200,000	$2,400,000
Enrollment	1,100	1,300	1,500	1,800
Cost per student	$ 1,363	$ 1,530	$ 1,467	$ 1,333

Thus, to estimate the cost of a four-year or non-repeater graduate, the costs per student from 1970-71 to 1973-74 are added. Hence, the cost of one four-year graduate is $1,363 + $1,530 + $1,467 + $1,333 = $5,713. To calculate the cost of a five-year repeater graduate, the cost per student in each of the five years are added together.

Cost of dropout. The cost of a dropout is computed in the same manner as that of a graduate. Thus, a first-year dropout (a student who leaves school during the first year) costs ($1,363; a second-year dropout, $2,893 ($1,363 + $1,530); and a third-year dropout, $4,360 ($2,893 + $1,467).

Cost of repeaters. The calculation for the cost of a repeater uses the same cost per student per year as in the cost estimate of graduates. However, the repeater cost is not cumulative. For example, a first-year repeater (a student who repeats a semester or a curriculum year during the first year in college) costs $1,363; a second-year repeater costs $1,530; and a third-year repeater, $1,467. This was resorted to for two reasons: (1) a rpeater is not a "total" loss as in the case of a dropout; and (2) a repeater who eventually graduates will not be charged duplicated costs, e.g., when he or she graduates, his or her total cost equals only the cost of a graduate since a repeater has already been charged the cost for every year he or she repeated.

Measuring Perceptions of Dropouts and Repeaters about their College Life

Frequency distribution and ranking. To evaluate the perceptions of dropouts and repeaters about their college life, the frequencies of responses to each item in the questionnaire were taken and then summed up per item. The total responses for all items were then ranked from highest to lowest to interpret the student's perceptions.

χ^2, t- and λ-tests. To determine if significant differences existed in the distribution of responses of the dropouts and repeaters to the items in the questionnaires as regards their perceptions of college life, the χ^2 and λ tests were used. Determination of the significance of the differences was based on a significance level of 0.05.

In addition, differences between the mean responses of dropouts and repeaters to the common items in the dropout and repeater questionnaires were tested by using t-test, again using a significance level of 0.05.

Summary

Chapter III discussed the materials and methods used in the study. The populations studied consisted of dropouts and repeaters of four Venezuelan teachers colleges. Calculations for rates of repetition and dropping out as well as costs of graduates, dropouts and repeaters were presented. A survey questionnaire was employed to evaluate the perceptions of dropouts and repeaters about their college life.

The χ^2, t- and λ tests were used in determining the significance of the differences of responses of the ropouts and repeaters.

Inasmuch as there was a reduction in sample size due to difficulties encountered in contacting the subjects for interview, limitations were imposed on the interpretation of the results of the study.

CHAPTER IV

RESULTS AND DISCUSSION

Introduction

This chapter presents and discusses the results of the study. The discussion is divided into three main parts: (1) rates of graduation, dropping out and repetition; (2) cost of graduates and economic wastage due to dropouts and repeaters; and (3) perceptions of dropouts and repeaters about some institutional variables which may have some influence on their decision to leave college or repeat courses.

Rates of Graduates, Dropouts and Repeaters

The number and percentage of graduates of all four colleges and in the individual institutions are in Table IV while those of dropouts and repeaters are reported in Table V. The graduates shown in Table IV consist of two groups--the non-repeater and the repeater graduates. A non-repeater graduate is one who finished a degree within the prescribed curriculum years. Thus, in those college which offer a four-year degree in teacher education, a non-repeater

TABLE IV

NUMBER AND PERCENTAGE OF GRADUATES AT THE TEACHERS COLLEGES

College	Cohort	Total Enrollment	Number of Years to Graduate: 4 No.	4 %	5 No.	5 %	6 No.	6 %	7 No.	7 %	Total No.	Total %
All Colleges	1970	1,609	308	19.1	306	19.0	200	12.4	107	6.6	921	57.2
	1971	2,554	142	5.6	478	18.7	369	14.4	-	-	989	38.7
	1972	4,018	436	10.8	980	24.4	-	-	-	-	1,416	35.2
Grand Total		8,181	886	10.8	1,764	21.6	569	7.0	107	1.3	3,326	40.7
IUPC	1970	1,070	72	6.7	288	26.9	169	15.8	84	7.9	613	57.3
	1971	1,632	142	8.7	233	14.3	245	15.0	-	-	620	38.0
	1972	1,554	195	12.5	266	17.1	-	-	-	-	461	29.7
	Subtotal	4,256	409	9.6	787	18.5	414	9.7	84	2.0	1,694	39.8
IUPEB	1970	539	236	43.4	18	3.3	31	5.8	23	4.3	308	57.1
	1971	922	-	-	245	26.6	124	13.4	-	-	369	40.0
	1972	1,358	-	-	361	26.4	-	-	-	-	361	26.4
	Subtotal	2,829	236	8.3	624	22.1	155	5.5	23	0.8	1,038	36.7
IUPEMAR	1972	608	-	-	256	42.1	-	-	-	-	256	42.1
IUPEM	1972	488	241	49.4	97	19.9	-	-	-	-	338	69.3

TABLE V

NUMBER AND PERCENTAGE OF DROPOUTS AND REPEATERS AT THE TEACHERS COLLEGES

College	Cohort	Curriculum Year I No.	I %	II No.	II %	III No.	III %	IV No.	IV %	Total No.	Total %
					Dropouts						
All	1970	258	16.0	99	6.2	32	2.0	77	4.8	466	29.0
	1971	671	16.0	115	4.5	79	3.1	28	1.1	893	35.0
	1971	489	12.2	136	3.4	63	1.6	18	0.4	706	17.6
	Gr. Total	1,418	17.3	350	4.3	174	2.1	123	1.5	2,065	25.2
					Repeaters						
	1970	401	24.9	215	13.4	90	5.6	129	8.0	835	51.9
	1971	678	26.6	296	11.6	144	5.6	156	3.2	1,274	59.6
	1972	701	17.4	571	14.2	337	8.4	518	12.4	2,127	52.9
	Gr. Total	1,780	21.8	1,082	13.2	571	7.0	803	9.8	4,236	51.8
					Dropouts						
IUPC	1970	239	22.3	85	7.9	28	2.6	76	7.1	428	40.0
	1971	418	25.6	107	6.6	76	4.7	26	1.6	627	38.4
	1972	278	17.9	105	6.8	50	3.2	12	0.8	445	28.6
	Subtotal	935	22.0	297	7.0	154	3.6	114	2.7	1,500	35.2
					Repeaters						
	1970	321	30.0	128	11.9	59	5.5	62	5.8	570	53.3
	1971	505	30.9	184	11.3	92	5.6	82	5.0	863	52.9
	1972	451	39.0	223	14.3	114	7.3	126	8.1	914	58.8
	Subtotal	1,277	30.0	536	12.6	265	6.2	270	6.3	2,347	55.1
					Dropouts						
IUP-	1970	19	3.5	14	2.6	4	0.7	1	0.2	38	7.0
EB	1971	253	27.4	8	0.9	3	0.3	2	0.2	266	28.8
	1972	-	-	18	1.3	7	0.5	6	0.4	31	2.3
	Subtotal	272	9.6	40	1.4	14	0.5	9	0.3	335	11.8
					Repeaters						
	1970	80	14.9	87	16.1	31	5.8	67	12.4	265	49.2
	1971	173	18.8	112	12.2	52	5.7	74	8.0	411	44.6
	1972	-	-	295	21.6	181	13.2	368	26.9	844	61.7
	Subtotal	253	8.9	494	17.5	264	9.3	509	18.0	1,520	53.7
IUP-	Dpt. '72	158	26.0	3	0.5	1	0.2	0	0.0	162	26.6
MAR	Rep. '72	155	25.5	18	3.0	11	1.8	6	1.0	190	31.2
IUP-	Dpt. '72	53	10.9	10	2.0	5	1.0	0	0.0	68	13.9
EM	Rep. '72	95	19.5	35	7.2	31	6.4	18	3.7	179	36.7

graduate finished the degree in four years. On the other hand, a repeater graduate in these colleges is one who finished the degree beyond the four prescribed curricular years, i.e., a five-year repeater graduate finished the degree in five years; a six-year repeater graduate finished in six years, and so on.

All Colleges

Graduates. Table IV shows that the two colleges that existed by 1970 had a combined output in the 1970 cohort of 308 (19.1%) non-repeater graduates; 306 (19.0%) five-year graduates; 200 (12.4%) six-year graduates; and 107 (6.6%) seven-year graduates in four-year degree courses. In the 1971 cohort there were 142 (5.6%) non-repeater graduates; 478 (18.7%) five-year graduates; and 369 (14.4%) six-year graduates. Chort 1972 had 436 (10.8%) and 980 (24.4%) non-repeater and five-year graduates, respectively.

In all cohorts of the four colleges, 886 (10.8%) graduated in four years; 1,764 (21.5%) in five years; 569 (7.0%) in six years; and 107 (1.3%) in seven years. In all, 3,326 students (40.7 per cent of the total initial enrollments) graduated between 1974 and 1977 in the colleges under study.

Dropouts. In this discussion, a first-year dropout is a student who left school during his freshman year; a second-year dropout leaves college during his sophomore year, and so on.

Dropout rates for all colleges are reflected in Table V. The year distribution of dropouts in the 1970 cohort was 258 (16.0%), 99 (6.2%), 32 (2.0%) and 77 (4.8%) for the first, second, third and fourth years, respectively. Cohort 1971 had 671 (16.0%), 115 (4.5%), 79 (3.1%) and 28 (1.1%) dropouts in the first, second, third and fourth years, respectively. In the 1972 cohort there were 489 (12.2%) dropouts in the first year; 136 (3.4%) in the second; 63 (1.6%) in the third; and 18 (0.4%) in the fourth year. Total dropouts in all the colleges were 1,418 (17.3%), 350 (4.3%), 174 (2.1%) and 123 (1.5%) during the first, second, third and fourth years, respectively. In all, 2,065 students (25.2 per cent of the total initial enrollments) dropped out between 1970 and 1977 in those four teachers colleges.

Repeaters. In this study the kinds of repeaters (first, second, third and so on) have the same connotations as the dropouts, i.e., first-year repeaters are those who repeated courses they failed during the first year; second-year repeaters repeated courses they failed in the second year, and so on.

Repetition in all colleges is also shown in Table V. This table indicates that the 1970 cohort of the four colleges had 401 (24.9%), 215 (13.4%), 90 (5.6%) and 129 (8.0%) repeaters in the first, second, third and fourh years, respectively. In the 1971 cohort, there were 678 (26.6%) repeaters in the first year; 296 (11.6%) in the second; 144 (5.6%) in the third; and 156 (3.2%) in the fourth year. The

1972 cohort had the following yearly distribution of repeaters: 701 (17.4%) for the first year; 571 (14.2%) for the second; 337 (8.4%) for the third; and 518 (12.4%) for the fourth year. The four colleges had these total repeaters: 1,780 (21.8%) in the first year; 1,082 (13.2%) in the second; 571 (7.0%) in the third; and 803 (9.8%) in the fourth year. In all, 4,236 students (51.8 per cent of the total inital enrollments) repeated courses between 1970 and 1977.

IUPC (Caracas Teachers College)

Graduates. The non-repeater graduates at Caracas from the 1970 cohort numbered only 72, or 6.7 per cent, of the initial enrollment (Table IV). The five-, six-, and seven-year repeater graduates in this cohort were 288 (26.9%), 169 (15.8%), and 84 (7.9%), respectively. Total graduates from this cohort were 613 or 57.3 per cent.

In the 1971 cohort, 142 (8.7%) graduated in four years; 233 (14.3%) in five years; and 245 (15.0%) in six years. Total graduates from this cohort were 620 or 38.0 per cent. In the 1972 cohort, the figures are 195 (12.5%) non-repeater graduates and 266 (17.1%) five-year repeater graduates. Total graduates from this cohort were 461 or 24.7 per cent.

The over-all graduation figures at IUPC are 409 (9.6%) in four years; 787 (18.5%) in five years; 414 (9.7%) in six years; and 87 (2.0%) in seven years. The total number of graduates from all cohorts in Caracas was 1,644 or 39.8 per cent.

Dropouts. As expected, the percentage of dropouts was generally highest at the end of the freshman year and lowest at the end of the junior year (Table V. In the 1970 cohort the total number of dropouts in the first to the fourth years was 428 or 40.0 per cent of the initial enrollment. The distribution of the total number of dropouts was 239, 85, 28 and 76 in the first, second, third and fourth years, respectively. The corresponding percentages, based on the initial enrollment, were 22.3, 7.9 2.6 and 7.1.

The total number of dropouts in the 1971 cohort was 627 or 38.4 per cent of the initial enrollment. The yearly dropouts and their percentages from the first to the fourth years were 418 (25.6%), 107 (6.6%) 76 (4.7%) and 26 (1.6%).

In the 1972 cohort the first, second, third and fourth year dropouts were 278 (17.9%), 105 (6.8%), 50 (3.2%) and 12 (0.8%), respectively. The total dropouts from this cohort from the first to the fourth years were 445 or 28.6 per cent of the total initial enrollment. There was a decreasing total dropout rate from the 1970 to the 1972 cohort at IUPC.

Repeaters. In all cohorts at IUPC, there was a rapid decrease in both number and percentage of repeaters from the first to the third year (Table V). The number and rate of repetition in the third and fourth years were similar in magnitude.

In the first cohort (1970) the numbers of repeaters were: first year, 321 (30.0%); second year, 128 (11.9%);

third year, 59 (5.5%); and fourth year, 62 (5.8%). The total number of repeaters in this cohort from first to fourth years was 570 or 53.3 per cent of the initial enrollment.

The distribution of repeaters (863 or 52.9 per cent) in the 1971 cohort was 505 (30.9%), 184 (11.3%), 92 (5.6%) and 82 (5.0%) for the first, second, third and fourth years, respectively.

In the 1972 cohort the total number of repeaters was 914 (58.8%) distributed as follows: first year, 451 (39.0%); second year, 223 (14.3%); third year, 114 (7.3%); and fourth year, 126 (8.1%).

IUPEB (Barquisimeto Teachers College)

Graduates. The non-repeater graduates at Barquisimeto in the 1970 cohort numbered 236 or 43.4 per cent of the initial enrollment. Cohorts 1971 and 1972 had no four-year graduates due to student and teacher strikes at IUPEB which caused the closing of formal classes although the other college activities went on as usual.

The five-, six- and seven-year repeater graduates of the 1970 cohort were 18 (3.3%), 31 (5.8%) and 23 (4.3%), respectively. In the 1971 cohort the five- and six-year graduates were 245 (26.6%) and 124 (13.4%), respectively. In the 1972 cohort, there were 361 (26.4%) five-year graduates.

The percentage of non-repeater graduates of all cohorts at IUPEB was 32.3, about thrice more than that of IUPC. Likewise, the percentages of five-, six- and seven-year

repeater graduates at IUPEB were also lower than those of IUPC. The total number of graduates from all cohorts was 1,038 or 36.7 per cent of the total initial enrollments.

Dropouts. The trends in dropout for all cohorts at IUPEB were similar to those of IUPC (Table V). The dropouts from the 1970 cohort at IUPEB were: first year, 19 (3.5%); second year, 14 (2.6%); third year, 4 (0.7%); and fourth year, 1 (0.2%). In the 1971 cohort the dropouts were: 253 (27.4%) in the first year; 8 (0.9%) in the second; 3 (0.3%) in the third; and 2 (0.2%) in the fourth year. There were 18 (1.3%), 7 (0.5%) and 6 (0.4%) dropouts during the second, third and fourth years in cohort 1972. Cohort 1971 had the largest total dropout, 266 or 28.8 per cent, due presumably to the fact that it had also the highest initial enrollment in the three cohorts.

In all cohorts at IUPEB the total dropouts were 272 (9.6%), 40 (1.4%), 14 (0.5%), and 9 (0.3%) during the first, second, third and fourth years, respectively. Total dropouts were 335 students or 11.8 per cent.

Repeaters. Table V also reflects the rate of repetition in the colleges. At IUPEB the yearly distribution of repeaters in the 1970 cohort was: first year, 80 (14.9%); second year, 87 (16.1%); third year, 31 (5.8%); and fourth year, 67 (12.4%).

The number and percentage of repetition in the 1971 cohort were 173 (18.8%), 112 (12.2%), 52 (5.7%) and 74

(8.0%) for the first, second, third and fourth years, respectively.

No data were available on repeaters during the first year of the 1972 cohort at IUPEB. In this cohort, the recorded yearly repeaters were 295 (21.6%), 181 (13.2%) and 368 (26.9%) for the second, third and fourth years, respectively.

In all cohorts, the yearly repetitions were 253 (8.9%), 494 (17.5%), 264 (9.3%) and 509 (18.0%) in the first, second, third and fourth years, respectively. The total number of repeaters was 1,520 students or 53.7 per cent.

IUPEMAR (Maracay Teachers College)

Graduates. Only one cohort was studied at IUPEMAR since at the time the investigation was conducted there was only one complete cohort available (1972 enrollees). The graduates, dropouts and repeaters at IUPEMAR are found in Tables IV and V. This table indicates that 256 or 42.1 per cent of the cohort graduated in five years.

Dropouts. The total dropouts in four years at IUPEMAR was 162 or 26.6 per cent, distributed as follows: first year, 158 (26.0%); second year, 3 (o.5%); third year, 1 (0.2%); and fourth year, none.

Repeaters. The yearly repeaters were 155 (25.5%), 18 (3.0%), 11 (1.8%) and 6 (1.0%) for the first, second, third and fourth years, respectively. Total repeaters was 190 or

31.2 per cent.

IUPEM (Maturin Teachers College)

Graduates. Table IV shows the graduates at IUPEM, along with those of the other colleges. For the same reason as that of IUPEMAR, only one cohort was studied at IUPEM. In this cohort (1972 enrollees), 241 or 49.4 per cent graduated in four years and 97 (19.9%) in five years.

Dropouts. The dropouts at IUPEM were 53 (10.9%) in the first year; 10 (2.0%) in the second; 5 (1.0%) in the third; and none in the fourth year. Total student dropout in four years was 68 or 13.9 per cent.

Repeaters. In IUPEM 95 (19.5%) repeated in the first year; 35 (7.2%) repeated in the second; 31 (6.4%) in the third; and 18 (3.7%) repeated in the fourth year. Total repeaters in four years were 179 or 36.7 per cent.

The numbers and percentages of graduates, dropouts and repeaters at IUPEMAR and IUPEM were more or less of comparable magnitudes.

Graduates, Dropouts and Repeaters by Departments or Fields of Study

IUPC

The number and percentage of graduates, dropouts and repeaters by departments or fields of study in the three cohorts at IUPC are reflected in Table VI.

TABLE VI

NUMBER AND PERCENTAGE OF GRADUATES, DROPOUTS AND REPEATERS BY DEPARTMENTS OR FILEDS AT IUPC

Department	Co-hort	Student Group	Curriculum Year I No.	I %	II No.	II %	III No.	III %	IV No.	IV %	Total No.	Total %	Graduates: Nonrepeaters No.	Nonrepeaters %	Repeaters Yrs.	Repeaters No.	Repeaters %
Biol. & Chem.	1970	Dropouts	26	13.9	5	2.7	8	4.3	14	7.5	53	28.3	22	11.8			
		Repeaters	43	23.0	32	17.1	19	10.2	18	9.6	112	59.9					
Spanish & Lit.		Dropouts	43	24.2	8	4.5	4	2.2	12	6.7	67	37.6	14	7.9			
		Repeaters	53	29.8	19	10.7	11	6.2	14	7.9	97	54.5					
Physical Edu.		Dropouts	7	6.4	18	16.5	0	0	27	24.8	52	47.7	1	0.9			
		Repeaters	39	35.8	15	13.8	2	1.8	0	0	56	51.4					
Social Sci.		Dropouts	27	16.8	10	6.2	5	3.1	1	0.6	43	26.7	12	7.4			
		Repeaters	33	20.5	31	19.2	17	10.6	25	15.5	106	65.8					
Modern Lang.		Dropouts	51	27.9	30	16.4	7	3.8	7	3.8	95	51.9	6	3.3			
		Repeaters	62	33.9	16	8.7	2	1.1	2	1.1	82	44.8					
Math & Physics		Dropouts	57	32.0	13	7.3	2	1.1	15	8.4	87	48.9	9	5.0			
		Repeaters	65	36.5	8	4.5	7	3.9	2	1.1	82	46.1					
Pedagogy		Dropouts	28	37.8	1	1.4	2	2.7	0	0	31	41.9	8	10.8			
		Repeaters	26	35.1	7	9.4	1	1.4	1	1.4	35	47.3					
Arts	1971	Dropouts	20	26.0	3	3.9	1	1.3	0	0	24	31.2	4	5.2			
		Repeaters	22	28.6	15	19.5	8	10.4	4	5.2	49	63.6					
Biol. & Chem.		Dropouts	53	17.2	25	8.1	18	5.8	8	2.6	104	33.8	41	13.3	5	61	32.6
		Repeaters	66	21.4	48	15.6	25	8.1	24	7.8	163	52.9					

TABLE VI (Continued)

Department	Cohort	Student Group	Curriculum Year I No.	I %	II No.	II %	III No.	III %	IV No.	IV %	Total No.	Total %	Graduates: Nonrepeaters No.	Nonrepeaters %	Repeaters Yrs.	Repeaters No.	Repeaters %
Spanish & Lit.	1971	Dropouts	56	29.0	24	12.4	3	1.6	3	1.6	86	44.6	18	9.3	5	56	31.5
		Repeaters	67	34.7	15	7.8	4	2.1	3	1.6	89	46.1					
Physical Edu.		Dropouts	21	18.6	3	2.6	4	3.5	3	2.6	31	27.4	6	5.3	5	19	17.4
		Repeaters	32	28.3	22	19.5	13	11.5	9	8.0	76	67.2					
Social Sci.		Dropouts	72	27.4	8	3.0	17	6.5	3	1.1	100	38.0	36	13.7	5	53	32.9
		Repeaters	83	31.6	18	6.8	15	5.7	11	4.2	127	48.3					
Modern Lang.		Dropouts	69	24.6	20	7.1	16	5.7	5	1.8	110	39.3	7	2.5	5	46	25.1
		Repeaters	82	29.3	43	15.4	15	5.4	23	8.2	163	58.2					
Math & Physics		Dropouts	71	29.2	15	6.2	13	5.3	4	1.6	103	42.4	17	7.0	5	35	19.7
		Repeaters	86	35.4	21	8.6	9	3.7	7	2.9	123	50.6					
Pedagogy		Dropouts	56	36.1	9	5.8	4	2.6	0	0	69	44.5	13	8.4	5	18	24.2
		Repeaters	67	43.2	2	1.3	3	1.9	1	0.6	73	47.1					
Arts	1972	Dropouts	14	19.4	4	5.6	0	0	0	0	18	25.0	9	12.5	5	16	20.8
		Repeaters	18	25.0	15	20.8	7	9.7	5	6.9	45	62.5					
Biol. & Chem.		Dropouts	47	16.6	13	4.6	9	3.2	3	1.1	72	25.4	48	17.0	5	58	18.8
		Repeaters	72	25.4	37	13.1	26	9.2	28	9.9	163	57.6			6	45	24.1
Spanish & Lit.		Dropouts	29	18.2	14	8.8	0	0	1	0.6	44	27.7	22	13.8	5	27	14.0
		Repeaters	52	32.7	17	10.7	13	8.2	11	6.9	93	58.5			6	23	12.9
Earth Sci.		Dropouts	10	38.5	3	11.5	0	0	0	0	13	50.0	6	23.1			
		Repeaters	6	23.1	0	0	1	3.8	0	0	7	26.9					
Physical Edu.		Dropouts	11	8.1	6	4.4	2	1.5	1	0.7	20	14.7	11	8.1	5	9	8.0
		Repeaters	43	31.6	27	19.9	16	11.8	19	14.0	105	77.2			6	15	13.8

TABLE VI (Continued)

Department	Cohort	Student Group	Curriculum Year I No.	I %	II No.	II %	III No.	III %	IV No.	IV %	Total No.	Total %	Graduates: Nonrepeaters No.	Nonrepeaters %	Repeaters Yrs.	Repeaters No.	Repeaters %
Soc. Sci.	1972	Dropouts	30	12.3	16	6.6	0	0	2	0.8	48	19.4	44	17.8	5	61	23.2
		Repeaters	58	23.9	38	15.6	18	7.4	41	16.9	155	62.7			6	49	30.4
Modern Lang.		Dropouts	68	22.7	34	11.3	20	6.7	3	1.0	125	41.7	20	6.7	5	25	8.9
		Repeaters	94	31.3	44	14.7	11	3.7	6	2.0	155	51.7			6	10	5.5
Math & Phys.		Dropouts	33	16.2	14	6.9	15	7.4	2	1.0	64	31.4	18	8.8	5	14	5.8
		Repeaters	61	29.9	30	14.7	17	8.3	14	6.9	122	59.8			6	12	6.7
Pedagogy		Dropouts	36	28.3	1	0.8	4	3.1	0	0	41	32.3	17	13.4	5	23	14.8
		Repeaters	47	37.0	15	11.8	5	3.9	2	1.6	69	54.3			6	15	20.3

Graduates. Physical Education had the lowest percentage (0.9) of non-repeater graduates from the 1970 cohort. This is followed by Modern Languages (3.3%), Math and Physics (5.0%), Social Sciences (7.4%), Spanish and Literature (7.9%), and Pedagogy (10.8%). Biology and Chemistry had the highest percentage (11.8) of non-repeater graduates.

In the 1971 cohort, the lowest percentage (2.5) of non-repeater graduates came from Modern Languages again, followed by Arts (5.2%), Physical Education (5.3%), Math and Physics (7.0%), Pedagogy (8.4%), Spanish and Literature (9.3%), Biology and Chemistry (13.3%), and Social Sciences (13.7%).

In the 1972 cohort, the lowest percentage (6.7) of non-repeater graduates was again from Modern Languages. This was followed by Physical Education (8.1%), Math and Physics (8.8%), Arts (12.5%), Pedagogy (13.4%), Spanish and Literature (13.8%), Biology and Chemistry (17.0%), Social Sciences (17.8%) and Earth Sciences (23.1%).

In terms of five-year repeater graduates in the 1970 cohort, Social Sciences had the highest percentage (32.9), followed by Biology and Chemistry (32.6%), Spanish and Literature (31.5%), Modern Languages (25.1%), Pedagogy (24.2%), Math and Physics (19.7%) and Physical Education (17.4%). In the 1971 cohort, the highest percentage (23.2) of five-year graduates was from the Social Sciences. This was followed by Arts (20.8%), Biology and Chemistry (18.8%), Pedagogy (14.8%), Spanish and Literature (14.0%), Modern Languages

(8.9%), Physical Education (8.0%) and Math and Physics (5.8%).

The highest percentage (30.4) of six-year graduates in the 1970 cohort was from the Social Sciences also. Next was Biology and Chemistry (24.1%), Pedagogy (20.3%), Physical Education (13.8%), Spanish and Literature (12.9%), Math and Physics (6.7%) and Modern Languages (5.5%).

Dropouts. As expected, dropouts were generally highest at the first year in all departments (Table VI). In the 1970 cohort, the highest percentage (51.9) of total dropouts was from Modern Languages. Next was Math and Physics, Physical Education, Pedagogy, Spanish and Literature, Biology and Chemistry, and Social Sciences with corresponding total dropout rates of 48.9, 47.7, 41.9, 37.6, 28.3 and 26.7 per cent.

Spanish and Literature had the highest total dropout rate (44.6%) in the 1971 cohort while the lowest (27.4%) was from Physical Education. The descending order of total dropout rates in the other departments was Pedagogy, 44.5 per cent; Math and Physics, 42.4 per cent; Modern Languages, 39.3 per cent; Social Sciences, 38.0 per cent; Biology and Chemistry, 33.8 per cent; and Arts, 31.2 per cent.

Repeaters. Like the dropout rate, the percentage of repeaters in all departments at IUPC was highest during the first year (Table VI). Total repetition rate in the 1970 cohort was highest in the Social Sciences (65.8%) and lowest

in the Modern Languages (44.8%). The other departments ranged in total repetition rate from 46.1 per cent (Math and Physics) to 59.9 per cent (Biology and Chemistry).

In the 1971 cohort, the total repetition rate ranged from 46.1 per cent in Spanish and Literature to 67.2 per cent in Physical Education. The total repetition rates in the other departments in descending order were: Arts, 63.2 per cent; Modern Languages, 58.2 per cent; Biology and Chemistry, 52.9 per cent; Math and Physics, 50.6 per cent; Social Sciences, 48.3 per cent; and Pedagogy, 47.1 per cent.

In the 1972 cohort, the total repetition rate ranged from 26.9 per cent in the Earth Sciences to 77.0 per cent in Physical Education. The other departments had the following total repetition rates arranged in ascending order: Modern Languages, 51.7 per cent; Pedagogy, 54.3 per cent; Biology and Chemistry, 57.6 per cent; Spanish and Literature, 58.5 per cent; Math and Physics, 59.8 per cent; Arts, 62.5 per cent; and Social Sciences, 62.7 per cent.

At IUPC, the low rates of non-repeater graduates were in Modern Languages, Math and Physics, and Physical Education while the high rates of non-repeater graduates were in Biology and Chemistry, and Social Sciences. The total drop-out rates were also high in Modern Languages, Math and Physics, and Physical Education while the low rates were in Biology and Chemistry and Arts. The high rates of repeaters were in Social Sciences, Arts, Spanish and Literature and Biology and Chemistry whereas the low rates were in Earth

Sciences, Modern Languages and Pedagogy.

IUPEB

The number and rates of graduates, dropouts and repeaters in the different departments at IUPEB are found in Table VII.

Graduates. The highest rate of non-repeater graduates in the 1970 cohort came from Home Economics (86.1%) while the lowest (about 28.0%) were both from English and Math. The rates of non-repeater graduates from the other departments were Business Education, 66.7 per cent; Experimental Sciences, 61.2 per cent; Industrial Education, 57.3 per cent; Social Sciences, 55.9 per cent; Physical Education, 54.2 per cent; Agriculture, 45.4 per cent; and Spanish and Literature, 36.8 per cent.

In the 1971 cohort, the highest rate of non-repeater graduates (91.7%) came from Home Economics again while the lowest (8.8%) came also from English. The other fields followed in this order: Social Sciences, 81.2 per cent; Industrial Education, 80.0 per cent; Business Education, 75.8 per cent; Physical Education, 61.5 per cent; both Agriculture and Spanish and Literature, 45.5 per cent; Math, 22.2 per cent; and Experimental Sciences, 21.7 per cent.

For cohort 1972, Home Economics again topped the rate (75.6%) of non-repeater graduates while the lowest was again from the English Department (5.6%). The rates of

TABLE VII

NUMBER AND PERCENTAGE OF GRADUATES, DROPOUTS AND REPEATERS BY DEPARTMENTS OR FIELDS AT IUPEB

Department	Cohort	Student Group	Curriculum Year I No.	%	II No.	%	III No.	%	IV No.	%	Total No.	%	Graduates: Nonrepeaters No.	%	Repeaters Yrs.	No.	%
Exp. Sci.	1970	Dropouts	-		3	3.5	1	1.2	0	0	4	4.7	52	61.2			
		Repeaters	-		20	23.5	2	2.4	7	8.2	29	34.1					
Phys. Edu.		Dropouts	-		0	0	0	0	0	0	0	0	13	54.2			
		Repeaters	-		2	8.3	3	12.5	6	25.0	11	45.8					
English		Dropouts	-		4	9.3	2	4.6	1	2.3	7	16.3	12	27.9			
		Repeaters	-		18	41.9	1	2.3	5	11.6	24	55.8					
Math		Dropouts	-		2	5.6	0	0	0	0	2	5.6	10	27.8			
		Repeaters	-		9	25.0	4	11.1	11	30.6	24	66.7					
Soc. Sci.		Dropouts	-		0	0	1	1.7	0	0	1	1.7	33	55.9			
		Repeaters	-		3	5.1	6	10.2	16	27.1	25	42.4					
Spanish & Lit.		Dropouts	-		1	5.3	0	0	0	0	1	5.3	7	36.8			
		Repeaters	-		1	5.3	3	15.8	7	36.8	11	57.9					
Home Econ.		Dropouts	-		0	0	0	0	0	0	0	0	31	86.1			
		Repeaters	-		5	13.9	0	0	0	0	5	13.9					
Bus. Edu.		Dropouts	-		1	3.3	0	0	0	0	1	3.3	20	66.7			
		Repeaters	-		1	3.3	4	13.3	4	13.3	9	30.0					
Agriculture		Dropouts	-		1	3.0	0	0	0	0	1	3.0	15	45.4			
		Repeaters	-		9	27.3	4	12.1	4	12.1	17	51.5					

TABLE VII (Continued)

Department	Cohort	Student Group	Curriculum Years I No.	I %	II No.	II %	III No.	III %	IV No.	IV %	Total No.	Total %	Graduates: Nonrepeaters No.	Nonrepeaters %	Repeaters: Yrs.	Repeaters No.	Repeaters %
Indus. Edu.	1970	Dropouts	-		2	2.7	0	0	0	0	2	2.7	43	57.3			
		Repeaters	-		19	25.3	4	5.3	7	9.3	30	40.0					
Exp. Sci.	1971	Dropouts	-		1	0.9	1	0.9	0	0	2	1.7	25	21.7	5	5	5.9
		Repeaters	-		40	34.8	12	10.4	36	31.3	88	76.5					
Physical Edu.		Dropouts	-		0	0	0	0	0	0	0	0	16	61.5	5	4	16.7
		Repeaters	-		5	19.2	3	11.5	2	7.7	10	38.5					
Math		Dropouts	-		2	5.6	1	2.8	0	0	3	8.3	8	22.2	5	3	8.3
		Repeaters	-		12	33.3	7	19.4	6	16.7	25	69.4					
Spanish & Lit.		Dropouts	-		0	0	0	0	0	0	0	0	14	45.2	5	4	21.0
		Repeaters	-		8	25.8	6	19.4	3	9.7	17	54.8					
English		Dropouts	-		3	5.3	1	1.8	1	1.8	5	8.8	5	8.8	5	8	18.6
		Repeaters	-		22	38.6	10	17.5	15	26.3	47	82.4					
Soc. Sci.		Dropouts	-		0	0	0	0	1	1.1	1	1.1	72	81.8	5	14	23.7
		Repeaters	-		7	8.0	4	4.5	4	4.5	15	17.0					
Home Econ.		Dropouts	-		0	0	0	0	0	0	0	0	22	91.7	5	1	2.8
		Repeaters	-		1	4.2	1	4.2	0	0	2	8.3					
Indus. Edu.		Dropouts	-		1	1.8	0	0	0	0	1	1.8	44	80.0	5	9	12.0
		Repeaters	-		4	7.3	3	5.5	3	5.5	10	18.2					
Bus. Edu.		Dropouts	-		0	0	0	0	0	0	0	0	25	75.8	5	2	6.7
		Repeaters	-		6	18.2	2	6.1	0	0	8	24.2					
Agriculture		Dropouts	-		1	3.2	0	0	0	0	1	3.2	14	45.2	5	1	3.0
		Repeaters	-		7	22.6	4	12.9	5	16.1	16	51.6					

TABLE VII (Continued)

Department	Cohort	Student Group	Curriculum Year I No.	%	II No.	%	III No.	%	IV No.	%	Total No.	%	Graduates: Nonrepeaters No.	%	Repeaters Yrs.	No.	%
Exp. Sci.	1972	Dropouts	-		3	1.1	1	0.4	1	0.4	5	1.9	62	23.4	5	35	30.4
		Repeaters	-		70	26.4	32	12.1	96	36.2	198	74.7			6	2	2.4
Phys. Edu.		Dropouts	-		0	0	0	0	0	0	0	0	11	61.1	5	7	26.9
		Repeaters	-		3	16.7	2	11.1	2	11.1	7	38.9					
Math		Dropouts	-		4	3.3	1	0.8	1	0.8	6	5.0	14	11.7	5	13	36.1
		Repeaters	-		36	30.0	27	22.5	37	30.8	100	83.3			6	3	8.3
Spanish & Lit.		Dropouts	-		1	1.0	0	0	1	1.0	2	2.1	28	29.2	5	12	38.7
		Repeaters	-		7	7.3	30	31.3	29	30.2	66	68.8			6	2	10.5
English		Dropouts	-		5	2.5	2	1.0	1	0.5	8	4.1	11	5.6	5	24	42.1
		Repeaters	-		68	34.5	37	18.8	73	37.1	178	90.4			6	7	16.3
Soc. Sci.		Dropouts	-		2	0.8	1	0.4	0	0	3	1.2	56	22.3	5	14	15.9
		Repeaters	-		10	27.9	31	12.4	91	36.3	192	76.5			6	3	5.1
Home Econ.		Dropouts	-		0	0	0	0	0	0	0	0	34	75.6	6	2	5.6
		Repeaters	-		2	4.4	4	8.9	5	11.1	11	24.4					
Indus. Edu.		Dropouts	-		1	1.3	1	1.3	0	0	2	2.6	50	64.1	5	4	7.3
		Repeaters	-		10	12.8	5	6.4	11	14.1	26	33.3			6	2	2.7
Bus. Edu.		Dropouts	-		0	0	0	0	1	1.6	1	1.6	31	50.0	5	5	15.2
		Repeaters	-		11	17.7	9	14.5	10	16.1	30	48.4					
Agriculture		Dropouts	-		2	1.9	1	1.0	1	1.0	4	3.8	64	61.5	5	10	31.3
		Repeaters	-		18	17.3	4	3.8	14	13.5	36	34.6			6	2	6.1

non-repeater graduates in Industrial Education, Agriculture, Physical Education, Business Education, Spanish and Literature, Experimental Sciences and Social Sciences were 64.1, 61.5, 61.1, 50.0, 29.2, 23.4 and 22.3 per cent, respectively.

The highest percentage of five-year repeater graduates in the 1970 cohort was in Social Sciences (23.7) and the lowest (2.8) was in Home Economics. The others were: Spanish and Literature, 21.0 per cent; English, 18.6 per cent; Physical Education, 16.7 per cent; Industrial Education, 12.0 per cent; Math, 8.3 per cent; Business Education, 6.7 per cent; Experimental Sciences, 5.9 per cent; and Agriculture, 3.0 per cent.

The 1970 cohort had the highest rate of six-year repeater graduates in English (16.3%) and the lowest, 2.4 per cent, was in Experimental Sciences. The other six-year repeater graduate rates were 10.5, 8.3, 6.1, 5.6, 5.1 and 2.7 per cent for Spanish and Literature, Math, Agriculture, Home Economics and Social Sciences, respectively.

Dropouts. The highest dropout rate in the 1970 cohort was from English (16.3%) while the lowest rate (0%) was from both Home Economics and Physical Education. The other departments had 5.6, 5.3, 4.7, 3.3, 3.0, 2.7 and 1.8 per cent dropouts for Math, Spanish and Literature, Experimental Sciences, Business Education, Agriculture, Industrial Education and Social Sciences, respectively.

The dropout rate in the 1971 cohort was again highest from English (8.8%) and none from Home Economics, Business

Education, Physical Education and Spanish and Literature. The other departments, Math, Agriculture, Industrial Education and Experimental Sciences had dropout rates of 8.3, 3.2, 1.8 and 1.7 per cent, respectively.

The highest rate of dropouts from the 1972 cohort at IUPEB was from English (82.4%), followed by Experimental Sciences (76.5%), Math (69.4%), Spanish and Literature (54.8%), Agriculture (51.6%), Physical Education (38.5%), Industrial Education (18.2%), Social Sciences (17.0%) and Home Economics (8.3%).

Repeaters. The highest rate of repeition (66.7%) in the 1970 cohort was from Math and the lowest (13.9%) came from Home Economics. The others were 59.9, 55.8, 51.5, 45.8, 42.4, 40.0, 34.1 and 30.0 per cent for Spanish and Literature, English, Agriculture, Physical Education, Social Sciences, Industrial Education and Business Education, respectively.

At IUPEB, the very high dropout and repetition rates as well as the very low rates in non-repeater graduates, were found in the English and Math Departments. The very high rates of non-repeater graduates and the very low rates of dropouts and repetition were in Home Economics.

IUPEMAR

The numbers and rates of graduation, dropping out and repetition by departments or fields of study at IUPEMAR are

in Table VIII.

Graduates. As previously stated, there was only one cohort at IUPEMAR (1972), hence there were no data on repeater graduates. The highest rate of graduation (95.3%) at IUPEMAR was from Biology, followed by Social Sciences (93.6%), Chemistry (88.6%), Physical Education (87.5%), English (85.5%), Math (75.8%), Physics (75.0%) and Spanish and Literature (73.9%).

Dropouts. Dropouts were highest in Math (6.1%), followed by English (2.9%). All the other departments had no dropouts in four years.

Repeaters. Repetition at IUPEMAR was highest in Spanish and Literature (26.1%) and lowest in Biology (4.7%). The other repetition rates were 25.0, 18.2, 12.5, 11.6, 11.4 and 6.4 per cent for Physics, Math, Physical Education, English, Chemistry and Sociences, respectively.

IUPEM

Table IX shows the numbers and rates of graduation, dropping out and repetition at IUPEM with only one cohort studied.

Graduates. The highest rate of non-repeater graduates was in Biology (92.5%), while the lowest (26.7%) was in Math. The rates of non-repeater graduates in the other departments were 78.1, 74.1, 71.0, 67.1, 55.7 and 51.6 per

TABLE VIII

NUMBER AND PERCENTAGE OF GRADUATES, DROPOUTS AND REPEATERS BY DEPARTMENTS OR FIELDS AT IUPEMAR

Department	Student Group	Curriculum Year I No.	I %	II No.	II %	III No.	III %	IV No.	IV %	Total No.	Total %	Graduates No.	Graduates %
Biology	Dropouts	-		0	0	0	0	0	0	0	0	61	95.3
	Repeaters	-		2	3.1	1	1.6	0	0	3	4.7		
Social Sci.	Dropouts	-		0	0	0	0	0	0	0	0	44	93.6
	Repeaters	-		3	6.4	0	0	0	0	3	6.4		
Physics	Dropouts	-		0	0	0	0	0	0	0	0	12	75.0
	Repeaters	-		3	18.8	1	6.3	0	0	4	25.0		
English	Dropouts	-		1	1.4	1	1.4	0	0	2	2.9	59	85.5
	Repeaters	-		5	7.2	2	2.9	1	1.4	8	11.6		
Math	Dropouts	-		2	6.1	0	0	0	0	2	6.1	25	75.8
	Repeaters	-		3	9.1	2	6.1	1	3.0	6	18.2		
Chemistry	Dropouts	-		0	0	0	0	0	0	0	0	31	88.6
	Repeaters	-		1	2.9	1	2.9	2	5.7	4	11.4		
Spanish & Lit.	Dropouts	-		0	0	0	0	0	0	0	0	17	73.9
	Repeaters	-		1	4.3	4	17.4	1	4.3	6	26.1		
Physical Edu.	Dropouts	-		0	0	0	0	0	0	0	0	7	87.5
	Repeaters	-		0	0	0	0	1	12.5	1	12.5		

TABLE IX

NUMBER AND PERCENTAGE OF GRADUATES, DROPOUTS AND REPEATERS BY DEPARTMENTS OR FIELDS AT IUPEM

Department	Student Group	Curriculum Year I No.	%	II No.	%	III No.	%	IV No.	%	Total No.	%	Graduates: Nonrepeaters No.	%	Repeaters Yr.	No.	%
Agriculture	Dropouts	-		2	3.7	0	0	0	0	2	3.7	40	74.1	5	13	24.1
	Repeaters	-		5	9.3	5	9.3	2	3.7	12	22.2					
Biology	Dropouts	-		0	0	1	1.2	0	0	1	1.2	77	92.8	5	21	25.3
	Repeaters	-		3	3.6	1	1.2	1	1.2	5	6.0					
Bus. Edu.	Dropouts	-		0	0	1	3.2	0	0	1	3.2	16	51.6	5	8	25.8
	Repeaters	-		7	22.6	4	12.9	3	9.7	14	45.2					
Physics	Dropouts	-		0	0	0	0	0	0	0	0	6	66.7	5	5	55.6
	Repeaters	-		2	22.2	1	11.1	0	0	3	33.3					
English	Dropouts	-		1	3.2	0	0	0	0	1	3.2	22	71.0	5	12	38.7
	Repeaters	-		4	12.9	3	9.7	1	3.2	8	25.8					
Math	Dropouts	-		3	10.0	1	3.3	0	0	4	13.3	8	26.7	5	11	36.7
	Repeaters	-		5	16.7	8	26.7	5	16.7	18	60.0					
Pedagogy	Dropouts	-		4	5.7	2	2.9	0	0	6	8.6	47	67.1	5	17	24.3
	Repeaters	-		6	8.6	7	10.0	4	5.7	17	24.3					
Chemistry	Dropouts	-		0	0	0	0	0	0	0	0	25	78.1	5	10	31.3
	Repeaters	-		3	9.4	2	6.3	2	6.3	7	21.9					

cent for Chemistry, Agriculture, English, Pedagogy, Physics and Business Education, respectively.

Physics had the highest percentage of five-year repeater graduates (55.6), followed by 28.7 for English, 36.7 for Math, 31.3 for Chemistry, 25.8 for Business Education, 25.3 forBiology, 24.3 for Pedagogy, and 24.1 for Agriculture.

Dropouts. The highest dropout rate was in Math (13.3%) followed by Pedagogy (8.6%), Agriculture (3.7%), English and Education which both had 3.2 per cent, Biology (1.2%) and Chemistry and Physics, none.

Repeaters. The lowest percentage of repetition was in Biology (6.0) while the highestwas in Math (60.0). The other repetition rates were Chemistry, 21.9 per cent; Agriculture, 22.2 per cent; Pedagogy, 24.3 per cent; English, 25.8 per cent; Physics, 33.3 per cent; and Business Education, 45.2 per cent.

In general, dropout and repetition rates were lower at IUPEMAR and IUPEM than at IUPC and IUPEB in the order: IUPC > IUPEB > IUPEMAR = IUPEM. In terms of percentage of non-repeater graduates, the rate was higher at IUPEMAR and and IUPEM than at IUPC and IUPEB in this order: IUPEM = IUPEMAR > IUPEB > IUPC.

Cost of Graduates, Dropouts and Repeaters

Cost per Student per Year

To calculate the cost of graduates, dropouts and repeaters, the unit annual cost per student was used. The computed per capita costs per year in the four teachers colleges are in Table X. This table shows that the per capita cost at IUPEMAR and IUPEM during the first three years was very much higher than that of IUPC and IUPEB. This is because the yearly enrollment during the first three years following the establishment of IUPEMAR and IUPEM were very much smaller in proportion to the annual budget, which included huge allotments for buildings and equipment needed to get the schools started. During these years, enrollment was limited since buildings were just being constructed.

Cost of Graduates and Wastage Caused by Dropping Out and Repeating

The cost of graduates and wastage due to dropouts and repeaters in the four colleges from 1970 to 1977 are in Table XI.

Cost of graduates. The average cost per graduate who finished the course in four years was $5,765, $4,970, $8,622 and $9,625 for IUPC, IUPEB, IUPEMAR and IUPEM, respectively (Table XI). There were no available data for five-year

TABLE X

ANNUAL BUDGET, YEARLY ENROLLMENT AND COST PER STUDENT PER YEAR AT THE TEACHERS COLLEGES FROM 1970 TO 1977

College	Items	Academic Years 1970-1971	1971-1972	1972-1973	1973-1974	1974-1975	1975-1976	1976-1977
IUPC	Annual Budget	$ 4,165,553	$ 5,295,548	$ 6,388,308	$ 7,471,327	$ 9,822,398	$ 10,249,645	$ 10,798,449
	Enrollment	3,725	4,230	4,750	5,120	5,545	5,855	6,609
	Cost per Student	$ 1,118	$ 1,252	$ 1,334	$ 1,459	$ 1,771	$ 1,751	$ 1,634
IUPEB	Annual Budget	$ 1,746,591	$ 2,279,359	$ 3,116,281	$ 3,825,582	$ 5,606,018	$ 6,528,977	$ 6,926,938
	Enrollment	1,503	2,144	3,078	3,123	5,360	7,282	8,428
	Cost per Student	$ 1,162	$ 1,063	$ 1,013	$ 1,225	$ 1,046	$ 897	$ 822
IUPEMAR	Annual Budget	$ -	$ -	$ 1,709,884	$ 2,347,554	$ 3,492,710	$ 4,054,159	$ 4,482,617
	Enrollment	-	-	608	1,246	1,966	3,301	4,866
	Cost per Student	$ -	$ -	$ 2,812	$ 1,884	$ 1,777	$ 1,228	$ 921
IUPEM	Annual Budget	$ -	$ -	$ 1,860,465	$ 2,085,271	$ 2,911,017	$ 3,712,080	$ 4,583,712
	Enrollment	-	-	488	943	1,438	2,352	3,345
	Cost per Student	$ -	-	$ 3,812	$ 2,211	$ 2,024	$ 1,578	$ 1,370

TABLE XI

COST OF GRADUATES AND WASTAGE DUE TO DROPOUTS AND REPEATERS AT THE TEACHERS COLLEGES FROM 1970 TO 1977

College	Year	Graduates			Dropouts			Repeaters		
		No.	Unit Cost	Total Cost	No.	Unit Cost	Total Cost	No.	Unit Cost	Total Cost
					Cohort 1970					
IUPC	70-71	-	$ -	$ -	239	$1,118	$ 267,202	321	$1,118	$ 358,878
	71-72	-	-	-	85	2,370	201,450	128	1,252	160,256
	72-73	-	-	-	28	3,704	103,712	59	1,334	78,706
	73-74	72	5,163	371,736	76	5,163	391,388	62	1,459	90,458
	74-75	288	6,934	1,996,992	-	-	-	-	-	-
	75-76	169	8,685	1,467,765	-	-	-	-	-	-
	76-77	84	10,319	866,796	-	-	-	-	-	-
		613	7,673	4,703,289	428	2,254	964,752	570	1,208	688,289
					Chort 1971					
	71-72	-	-	-	418	1,252	523,336	505	1,252	632,260
	72-73	-	-	-	107	2,586	276,702	184	1,334	245,456
	73-74	-	-	-	76	4,045	307,420	92	1,459	134,228
	74-75	142	5,816	825,872	26	5,816	151,216	82	1,771	145,222
	75-76	233	7,517	1,751,461	-	-	-	-	-	-
	76-77	245	9,151	2,241,995	-	-	-	-	-	-
		620	7,773	4,819,328	627	2,007	1,258,674	863	1,341	1,157,166
					Cohort 1972					
	72-73	-	-	-	178	1,334	370,852	451	1,334	601,634
	73-74	-	-	-	105	2,793	293,265	223	1,459	325,357
	74-75	-	-	-	50	4,564	228,200	114	1,771	201,894

TABLE XI (Continued)

College	Year	Graduates No.	Graduates Unit Cost	Graduates Total Cost	Dropouts No.	Dropouts Unit Cost	Dropouts Total Cost	Repeaters No.	Repeaters Unit Cost	Repeaters Total Cost
					Cohort 1972					
IUPC	75-76	195	$6,315	$1,231,425	12	$6,315	$ 75,780	126	$1,751	$ 220,626
	76-77	266	7,949	2,114,434	-	-	-	-	-	-
		461	7,258	3,345,859	445	2,175	968,097	914	1,476	1,349,511
		1,694	7,597	12,868,476	1,500	2,128	3,191,523	2,347	1,361	3,194,975
					Cohort 1970					
IUPEB	70-71	-	-	-	19	1,162	22,078	80	1,162	92,960
	71-72	-	-	-	14	2,225	31.150	87	1,063	92,481
	72-73	-	-	-	4	3,238	12,952	31	1,013	31,403
	73-74	236	4,463	1,053,268	1	4,463	4,463	67	1,225	82,075
	74-75	18	5,509	99,162	-	-	-	-	-	-
	75-76	31	6,406	198,586	-	-	-	-	-	-
	76-77	23	7,228	166,244	-	-	-	-	-	-
		308	4,926	1,517,260	38	1,859	70,643	265	1,128	298,919
					Cohort 1971					
	71-72	-	-	-	253	1,063	268,939	173	1,063	183,899
	72-73	-	-	-	8	2,076	16,608	112	1,013	113,456
	73-74	-	-	-	3	3,301	9,903	52	1,225	63,700
	74-75	---[1]			2	4,347	8,694	74	1,046	77,404
	75-76	245	5,244	1,284,780	-	-	-	-	-	-
	76-77	124	6,066	752,184	-	-	-	-	-	-
		369	5,520	2,036,964	266	1,143	304,144	411	1,067	438,459
					Cohort 1972					
	72-73			-	18	1,225	22,050	295	1,225	361,375

TABLE XI (Continued)

College	Year	Graduates No.	Graduates Unit Cost	Graduates Total Cost	Dropouts No.	Dropouts Unit Cost	Dropouts Total Cost	Repeaters No.	Repeaters Unit Cost	Repeaters Total Cost
					Cohort 1972					
IUPEB	73-74	---[1]	$ -	$ -	7	$2,271	$ 15,897	181	$1,046	$ 189,326
	74-75	---[1]			6	3,168	19,008	368	897	330,096
	75-76	361	5,003	1,806,083	-	-	-	-	-	-
		361	5,003	1,806,083	31	1,837	56,955	844	1,044	880,797
		1,038	5,164	5,360,307	335	1,289	431,742	1,520	1,065	1,618,175
IUPEMAR	72-73	-	-	-	158	2,812	447,108	155	2,812	435,860
	73-74	-	-	-	3	4,696	14,088	18	1,884	33,912
	74-75	---[1]	-	-	1	6,473	6,473	11	1,777	19,547
	75-76	---[1]			0	7,701	0	6	1,228	7,368
	76-77	256	8,622	2,207,232	-	-	-	-	-	-
		256	8,622	2,207,232	162	2,887	467,669	190	2,614	496,687
IUPEM	72-73	-	-	-	53	3,812	202,036	95	3,812	362,140
	73-74	-	-	-	10	6,023	60,230	35	2,211	77,385
	74-75	-	-	-	5	8,047	40,235	31	2,024	62,744
	75-76	241	9,625	2,319,625	0	9,625	0	18	1,578	28,404
	76-77	97	10,995	1,066,515	-	-	-	-	-	-
		338	10,018	3,386,140	68	4,447	302,501	179	2,965	530,673
Grand Total		3,326	7,162	23,822,155	2,065	2,128	4,393,435	4,236	1,379	5,840,510

[1]There were no graduates during this school year, since there were no classes due to students and teachers strikes; hence, the non-repeater graduates in the cohort finished the four-year curriculum in the following year, the fifth year. However, although classes were shut down during the year, other activities of the college went on as usual.

graduates at IUPEMAR. The costs per six-year repeater graduate at IUPC and IUPEB were $8,918 and $6,406, respectively while seven-year repeater graduates per capita costs were $7,228 and $10,319 at IUPEB and IUPC, respectively.

Total cost during the period of study was $12,868,476 for 1,694 graduates at IUPC; $5,360,307 for 1,038 graduates at IUPEB; $2,207,232 for 256 graduates at IUPEMAR; and $3,386,140 for 338 graduates at IUPEM. Overall cost for the four colleges with 3,326 graduates was $23,822,155.

Wastage due to dropouts. Educators have divided opinions about economic wastage due to dropouts. Some view dropouts as a loss while others contend that they are not. Both camps have valid justifications. Although dropouts may be considered a loss in terms of unfulfilled objectives of training qualified professionals, they have gained some degree of education and experience while in school before leaving. This is especially true of those who drop out in later years. This "partial" experience and education certainly improve their capability and employability. In this study, however, the investigator takes the view that a public school dropout in Venezuela is an economic wastage because the Venezuelan government subsidizes college education and the country is in dire need of trained professionals.

The average financial wastage per first-year dropout was $1,235, $1,150, $2,812 and $3,812 for IUPC, IUPEB, IUPEMAR and IUPEM, respectively. The average wastage for each second-year dropout was $2,873 at IUPC; $2,236 at

IUPEB; $6,473 at IUPEMAR; and $8,047 at IUPEM. The wastages for each third-year dropout at IUPC, IUPEB, IUPEMAR and IUPEM were $4,104, $3,236, $6,473 and $8,047, respectively. The loss for each fourth-year dropout was $5,765 at IUPC; $3,993 at IUPEB; $7,701 at IUPEMAR; and $9,625 at IUPEM.

Dropout wastage by institution was $3,191,523 for 1,500 dropouts at IUPC; $431,742 for 335 dropouts at IUPEB; $467,669 at IUPEMAR with 162 dropouts; and $302,501 for 68 dropouts at IUPEM. Total financial wastage in the four institutions due to dropping out was $4,393,435 for 2,065 who left college. This amount represents 12.9 per cent of the combined appropriations of the colleges for the cohorts.

Wastage due to repetition. Per capita cost for first-year repeaters was $1,235 at IUPC; $1,150 at IUPEB; $2,812 at IUPEMAR; and $3,812 at IUPEM. The cost per second-year repeaters at IUPC, IUPEB, IUPEMAR and IUPEM was $1,348, $4,041, $1,884 and $2,211, respectively. The cost per repeater in the third year was $1,521 at IUPC; $1,045 at IUPEB; $1,777 at IUPEMAR; and $2,024 at IUPEM. Those who repeated in the fourth year each cost $1,660, $1,135, $1,228 and $1,578 at IUPC, IUPEB, IUPEMAR and IUPEM, respectively. Total cost for all repeaters by institutions was $3,194,975 at IUPC; $1,618,175 at IUPEB; $496,687 at IUPEMAR; and $530,673 at IUPEM. The total number of repeaters was 2,347, 1,520, 190 and 179 for IUPC, IUPEB, IUPEMAR and IUPEM, respectively.

For all colleges, the total wastage due to repetition was $5,840,510 for 4,236 repeaters, an amount representing

17.1 per cent of the combined outlay for the cohorts.

Perceptions of Dropouts and Repeaters

This section presents information on the demography and perceptions of students who dropped out and repeated. The dropouts and repeaters are discussed separately, then comparisons between the two are made.

Dropouts

The questionnaire items aimed at identifying the nature and perceptions of students who dropped out are discussed in the following subsections.

Sex and age. Of the 71 interviewees, 44 or 62.0 per cent were females and 27 or 38.0 per cent were males. Thus, the ratio of males to females was approximately 3 to 5. The distribution of dropouts by age group is shown in Table XII. It may be seen in this table that 63.4 per cent of the dropouts were 21 to 25 years old at the time of the interview, and 4.2 per cent were in the age group of 36 to 45 years. The difference, 32.4 per cent, was concentrated between the ages of 26 and 35 years. Hence, the majority of the dropouts were of college age in Venezuela at the time they withdrew from their institutions.

Fields of study. The number of dropouts in the different departments or fields of study are in Table XIII. The largest number of dropouts were in math and natural sciences

TABLE XII

AGE OF DROPOUTS

Age-group	Frequency	% of Total
21-25	45	63.4
26-30	14	19.7
31-35	9	12.7
36-40	2	2.8
41-45	1	1.4
Total	71	100.0

TABLE XIII

FIELDS OF STUDY OF DROPOUTS

Field of Study	Frequency	% of Total
Math and natural sciences[1]	27	38.0
Basic cycle[2]	15	21.1
Spanish literature and languages[3]	13	18.3
Social and geophysical sciences[4]	6	8.4
Technical and vocational education[5]	4	5.6
Pedagogy	3	4.2
Physical education	3	4.2

[1]Math, biology, chemistry and physics
[2]Only at IUPEB, IUPEMAR and IUPEM
[3]Spanish literature, English and French
[4]Social sciences, history, geography
[5]Industrial, business and special education and home economics

(38.0%), basic cycle (21.1%), Spanish and literature (18.3%). The other fields had four to eight per cent dropouts.

Duration in school before leaving. The duration of stay in school of dropouts prior to leaving is reported in Table XIV. It may be pointed out in this table that 83.1 percent of the dropouts withdrew when they had less than three years at school and 16.9 per cent stayed at least three years. From those leaving before they had completed three years, 49.2 per cent stayed in college less than one year, and 50.8 per cent stayed more than one year. These figures do not correspond with the earlier figures mentioned in this chapter which show that 68.7 per cent withdrew during the first year. This discrepance is presumably due to errors in the respondents' replies and to small sample size. At any rate, it seems likely that the figures obtained from the registrar's offices which contained all populations are more accurate.

TABLE XIV

DURATION OF STUDY PRIOR TO DROPPING OUT

Duration of Stay in School	Frequency	% of Total
Less than one semester	17	23.9
One semester or less than 1 year	18	25.3
One year or more but less than 2 years	11	15.5
Two years or more but less than 3 years	13	18.3
Three years or more	12	16.9

In terms of the last semester of enrollment after entering school and prior to dropping out (Table XV), the highest proportion of dropouts (25.4%) came from those who had attended only one semester, followed by those who attended for two semesters (21.1%), and six semesters (14.1%). The other periods, three to eight semesters, each accounted for five to ten per cent of the dropouts.

TABLE XV

DROPOUTS BY LAST SEMESTER OF ENROLLMENT AFTER COLLEGE ENTRANCE AND BEFORE DROPPING OUT

Semester	Frequency	% of Total
1	18	25.4
2	15	21.1
3	7	9.9
4	7	9.9
5	4	5.6
6	10	14.1
7	5	7.0
8	5	7.0

Kind of employment and financial status. According to the data gathered most of those who dropped out (95.8%) were full-time students while only 4.2 per cent were part-time students.

The time spent in working at their employment is as follows: 35.2 per cent were not working; 33.8 per cent were

working 11 to 20 hours; 26.8 per cent worked 21 to 35 hours; and 4.2 per cent, 1 to 10 hours.

Insofar as type of financial aid received was concerned 69.0 per cent of those who dropped out had no financial aid of any kind except state and parental support; 28.2 per cent had scholarships; and 2.8 per cent had other forms of financial aid.

GPA and dropping out. An attempt was made to determine GPA among dropouts and this information is reported in Table XVI. It is evident in this table that majority of those who dropped out had failing or very poor grades.

TABLE XVI

GPA OF DROPOUTS

GPA[1]	Frequency	% of Total
7	11	15.5
8	14	19.7
9	16	22.5
10	5	7.0
11	9	12.7
12	9	12.7
13	3	4.2
14	3	4.2
15	1	1.4

[1]GPA was based on a 20-point scale where 1-9 means failure and 10-20 is passing. The higher the number, the better is the achievement.

Change of field. From the questionnaires it was found that 87.3 per cent of those who dropped out never changed fields prior to dropping out. The remainder changed fields only once.

Factors in Students' Decision to Leave School

To gain an insight into the perceptions of students on the reasons for their dropping out of college, the data presented in Table XVII were gathered. The main reason that the students felt why they dropped out was low grades, followed by too demanding study time, difficult courses in their fields of study, family responsibility, and the feeling that a university gives more prestige to a graduate than a college. These were the top five reasons in descending order of perceived importance. The sixth was administrative quality of the administrators while the seventh was financial difficulty. Cutting off of financial aid was seen as least important.

The degree of satisfaction of dropouts with various features of their institutions is portrayed in Table XVIII. The greatest satisfaction reported was the size of enrollment at the institution. This means that the respondents do not like colleges with huge enrollments where the students are considered as numbers and not as persons. This item was followed by social opportunities, living accommodations, student quality, teachers' quality and cultural

TABLE XVII

IMPORTANCE OF REASONS FOR WITHDRAWAL REPORTED BY DROPOUTS

Reasons for Withdrawal[1]	Degree of Importance				Respondents	Mean	Rank
	1	2	3	4			
Low grades	3	12	9	47	71	3.41	1
Study time demanding	2	14	48	7	71	2.85	2
Difficult courses	3	30	31	7	71	2.59	3
Family responsibility	22	13	11	25	71	2.55	4
Universities more prestigious	15	31	10	15	71	2.35	5
Study habits	4	46	21	0	71	2.24	6
Insufficient funds	33	4	24	10	71	2.15	7
Wanted to work	23	21	22	5	71	2.13	8
Conflict with job	26	22	15	8	71	2.07	9
Institution irrelevant	19	37	9	6	71	2.03	10
Course dissatisfaction	16	45	10	0	71	1.92	11
Illness	31	29	7	4	71	1.77	12
Inadequate jobs to finance studies	31	30	8	2	71	1.76	13
Others	26	36	9	0	71	1.73	14
Marital situation	56	1	1	13	71	1.59	15
Insufficient financial aid	53	1	14	3	71	1.54	16
Financial aid unavailable	62	2	1	6	71	1.31	17
Moved to other place	66	5	0	0	71	1.07	18

[1]None = 1; Minor = 2; Moderate = 3; Major = 4

opportunities. These were the top five aspects of the teachers colleges that would most likely induce students to stay. The least satisfactory feature was recreational facilities.

Current activity. During the survey the interviewees were also asked what they were currently doing. The results are found in Table XIX. This table indicates that 76.1 per

TABLE XVIII

REPORTED DEGREE OF SATISFACTION OF DROPOUTS WITH VARIOUS ASPECTS OF THEIR EDUCATIONAL EXPERIENCE

Educational Aspects	Degree of Satisfaction[1] 1	2	3	4	Respondents	Mean	Rank
Number of students	0	2	36	33	71	3.44	1
Social opportunities	0	7	57	7	71	3.00	2
Student quality	0	7	62	2	71	2.92	3
Living accommodations	0	9	58	4	71	2.92	3
Cultural opportunities	1	15	52	3	71	2.80	4
Teachers' quality	0	16	53	1	69	2.78	5
Grading system	0	18	51	2	71	2.77	6
Academic advisors	0	24	47	0	71	2.66	7
Class schedule	1	14	54	2	71	2.66	7
Rules and regulations	0	26	44	1	71	2.65	8
Contact with teachers	0	34	34	3	71	2.56	9
Gen. quality of faculty	0	33	34	0	67	2.51	10
Intellectual stimulation	1	34	35	1	71	2.50	11
Student services	0	41	29	1	71	2.44	12
Pre-enrollment information	0	41	30	0	71	2.42	13
Location of college	4	37	29	1	71	2.38	14
Library services	12	34	25	0	71	2.18	15
Extracurricular activities	2	60	9	0	71	2.09	16
Content in majors	9	53	8	1	71	2.01	17
Teaching in majors	10	53	7	1	71	1.98	18
Administrators' quality	0	33	32	0	65	1.47	19
Recreational facilities	50	18	1	2	71	1.36	20

[1]None = 1; Little = 2; Moderate = 3; Some = 4

TABLE XIX

CURRENT ACTIVITIES OF DROPOUTS

Current Activity	Frequency	% of Total
Working on a job	54	76.1
Studying	11	15.5
Housekeeping	5	7.0
Seeking a job	1	1.4

cent of the dropouts were working on jobs at the time of the interview; 15.5 per cent were back in school studying; 7.0 per cent were housekeeping (all females); and 1.4 per cent was looking for a job.

Institution currently attending. Of those who went back to school the majority were studying in institutions other than the ones they left (Table XX). There were 84.5 per cent who said they were not attending any institution at all.

TABLE XX

INSTITUTIONS CURRENTLY ATTENDED BY DROPOUTS

Institutions Attending	Frequency	% of Total
None	60	84.5
Universidad Centro Occidental	5	7.0
Universidad Central de Venezuela	2	2.8
IUPEMAR	1	1.4
IUPEM	1	1.4
Universidad de Oriente	1	1.4
Universidad de Carabobo	1	1.4

Future plans. When asked what their future plans were 69.9 per cent responded that they would continue dropping out and doing what they were currently doing; 21.1 per cent replied they planned to return to the schools they left; and 9.9 per cent planned to transfer to other schools.

Repeaters

Sex and age. Out of 83 repeaters interviewed, there were 59 or 71.1 per cent females and 24 or 28.9 per cent males. The age distribution of the 83 repeaters is reflected in Table XXI. As can be seen in this table, majority of those who repeated (51.8%) were between 21 and 25 years old at the time of the interview. Only two repeaters were over 35 years old.

TABLE XXI

AGE OF REPEATERS

Age Group	Frequency	% of Total
21-25	43	51.8
26-30	24	28.9
31-35	14	16.9
36-40	1	1.2
41-45	0	0
46-50	1	1.2

Field of study. The rates or percentages of repeaters from the different fields are found in Table XXII. Math and natural sciences had the highest rate (43.4%), followed by Spanish and literature which both had 21.7 per cent, and by basic cycle, with 19.3 per cent. The rates of repeaters in the other fields ranged from 1.2 per cent in pedagogy to 7.2 per cent in social and geological sciences.

TABLE XXII

REPETITION RATES BY FIELDS OF STUDY

Field of Study	Frequency	% of Total
Math and natural sciences	36	43.4
Spanish literature and languages	18	21.7
Basic cycle	16	19.3
Social and geophysical sciences	6	7.2
Technical and vocational education	4	4.8
Physical education	2	2.4
Pedagogy	1	1.2

Repetition rates and time devoted to study, financial aid and change of field. Of the 83 interviewees, 72 or 86.7 per cent were full-time students and only 11 or 13.3 per cent part-time. In terms of financial aid, 49 (59.0%) had no form of financial aid except government subsidy and parental support; 34 (41.0%) had some kind of financial aid. With respect to change of field, 67 (80.7%) of the repeaters never changed fields; 15 (18.1%) changed once; and only 1 (1.2%) changed fields more than once.

Repetition rate and working periods. Table XXIII indicates the influence of working periods on repetition. This table shows that 36.1 per cent of the repeaters were not working; 10.8 per cent worked one to ten hours; 20.5 per cent worked 11 to 20 hours; and 32.5 per cent worked 21 to 35 hours.

TABLE XXIII

REPETITION RATES AND WORKING HOURS

Working Period	Frequency	% of Total
None	30	36.1
1-10 hours	9	10.8
11-20 hours	17	20.5
21-35 hours	27	32.5

Semesters repeated. The repetition rates and the number of semesters repeated are shown in Table XXIV. The total in this table is 120, more than the 83 interviewees. This is because some of them repeated more than one semester.

TABLE XXIV

NUMBER OF SEMESTER REPEATED

Semesters Repeated	Frequency	% of Total
1	35	29.2
2	7	5.8
3	16	13.3
4	8	6.7
5	13	10.8
6	17	14.2
7	16	13.3
8	8	6.7
Total	120	100.0

Most of the repeaters (29.2%) repeated the first semester. This is expected since they have just entered college and they were just adjusting to college life. The other repetition rates were 14.2 per cent in the sixth semester after enrollment; 13.3 per cent in the third and seventh semester; and 10.8 per cent in the fifth semester. Repeaters in the other semesters were 5.8 per cent in the second and 6.7 per cent in the fourth and eighth semesters.

Stated Reasons for Repetition

The degree of importance of selected possible reasons for repeating stated by the repeaters is shown in Table XXV. Low grades was given as the principal reason for repetition. The next overriding reason stated why the interviewees repeated was personal problems, followed by difficult courses, study time too demanding, and study habits. These were the top five reasons advanced for repeating. These reasons were in similar category of importance stated by those who dropped out as indicated in Table XVII. Problems with teachers had the least bearing on repetition.

Satisfaction with Institutional Aspects

Table XXVI shows the degree of satisfaction of repeaters with some aspects of their institutions. It can be seen in this table that location of the school was relatively the most satisfactory feature of the institution as perceived by the repeaters. This was followed by the number

TABLE XXV

IMPORTANCE OF REASONS FOR REPETITION
AS STATED BY REPEATERS

Reasons for Repetition	Degree of Importance[1] 1	2	3	4	Total	Mean	Rank
Low grades	0	0	13	70	83	3.84	1
Personal problems	2	0	32	49	83	3.54	2
Difficult courses	2	21	41	21	83	3.00	3
Study time demanding	2	20	48	13	83	2.86	4
Study habits	2	54	27	0	83	2.30	5
Insufficient money	32	21	21	9	83	2.08	6
Family responsibility	34	27	5	17	83	2.06	7
Insufficient financial aid	43	9	23	8	83	1.95	8
Conflict bet. job & study	37	22	17	7	83	1.93	9
Course dissatisfaction	22	54	2	5	83	1.88	10
Inadequate job	42	27	13	1	83	1.67	11
Illness	43	31	9	0	83	1.59	12
Others	49	24	10	0	83	1.53	13
Financial aid unavailable	68	11	3	1	83	1.24	14
Financial aid ended	72	7	3	1	83	1.19	15
Problems with teachers	70	12	1	0	83	1.16	16

[1]None = 1; Minor = 2; Moderate = 3; Major = 4

of students enrolled, social opportunities, living accommodations and grading system. These were the five most satisfactory aspects of the institutions as perceived by the repeaters.

TABLE XXVI

REPORTED SATISFACTION OF REPEATERS WITH SELECTED ASPECTS OF THEIR INSTITUTION

Institutional Aspect	Degree of Satisfaction[1] 1	2	3	4	5	Total	Mean	Rank
Location of institution	1	5	42	34	1	83	3.50	1
Number of students	0	0	41	33	5	83	3.47	2
Social opportunities	0	2	70	10	1	83	3.12	3
Living accommodations	0	16	52	15	0	83	2.99	4
Grading system	0	14	65	4	0	83	2.88	5
Rules and regulations	0	19	58	6	0	83	2.84	6
Cultural opportunities	0	29	52	2	0	83	2.67	7
Intellectual stimulation	1	26	56	0	0	83	2.66	8
Academic advisement	3	33	46	1	0	83	2.54	9
Extracurricular activity	1	62	20	0	0	83	2.23	10
Library services	27	36	20	0	0	83	1.92	11
Student services	15	40	27	1	0	83	1.37	12
Recreational facilities	62	19	1	1	0	83	1.29	13

[1]None = 1; Little = 2; Some = 3; Much = 4; Great - 5

χ^2, t- and λ-Tests on Relative Importance of Reasons for Dropping and Repeating and Degree of Satisfaction of Dropouts and Repeaters with Some Aspects of their Institutions

The χ^2 and λ tests for the relative importance of the reasons for dropping and repeating and the degree of satisfaction of dropouts and repeaters with some aspects of their institutions are reported in Tables XXVII and XXVIII. The t-tests for the group mean responses between dropouts and

repeaters on reasons for dropping or repeating and their degree of satisfaction with some auxiliary components or services of their institutions are in Tables XXIX and XXX. The λ test was used to demonstrate the value of knowledge of one variable in predicting a second variable (Mueller et al. 1970, p. 250).

Table XXVII shows that significant values were obtained from the responses of dropouts and repeaters in the different categories or relative importance, with the folowing reasons: low grades, difficult courses, insufficient money, financial aid unavailable, insufficient financial aid, family responsbility, and others. The pattern of responses indicate major to moderate importance for low grades and difficult courses whereas insufficient money, financial aid unavailable, insufficient financial aid, family responsibility and others tended to fall under minor to not important as reasons for dropping out or repeating.

As reflected in Table XXVII the greatest improvement on predictive value of the degree of importance was on "other" reasons (15%), followed by low grades (14%), family responsibility (10%), difficult courses (9%), insufficient financial aid (8%), course dissatisfaction (6%), and financial aid unavailable (5%). Inadequate job and conflict with job have two and one per cent improvement in their predictive value, respectively. The lowest improvement in prediction was in study habits, financial aid ended and study time too demanding all of which had λ values of zero.

TABLE XXVII

DISTRIBUTION OF RESPONSES OF DROPOUTS AND REPEATERS AS TO IMPORTANCE OF STATED REASONS FOR DROPPING OUT OR REPETITIONS

Reasons for Dropping/Repeating	Student Group	Degree of Importance[1]						χ^2	λ	df
		1	(1 + 2)	2	(2 + 3 + 4)	3	4	(3 + 4)			
Low Grades	Dropouts		15			9	47		19.43*	0.14	2
	Repeaters		0			13	70				
Difficult Courses	Dropouts		33			31	7		10.18*	0.09	2
	Repeaters		21			41	21				
Study Habits	Dropouts		50			21			0.14	0.00	1
	Repeaters		56			27					
Course Dissatisfaction	Dropouts	16		45				10	1.37	0.06	2
	Repeaters	32		54				7			
Conflict with Job	Dropouts	26		22		15	8		1.82	0.01	3
	Repeaters	37		22		17	7				
Inadequate Job	Dropouts	31		30				10	1.56	0.02	2
	Repeaters	42		27				14			
Insufficient Money	Dropouts	33		4		24	10		10.95*	0.03	3
	Repeaters	32		21		21	9				
Financial Aid Unavailable	Dropouts	62		2				7	6.43	0.05	2
	Repeaters	68		11				4			
Insufficient Financial Aid	Dropouts	53		1		14	3		11.04*	0.08	3
	Repeaters	43		9		23	8				
Financial Aid Ended	Dropouts	70			1				5.91	0.00	2
	Repeaters	72			11						
Study Time Too Demanding	Dropouts		16			48	7		1.82	0.00	2
	Repeaters		22			48	13				
Family Responsibility	Dropouts	22		13		11	25		10.37*	0.10	3
	Repeaters	34		27		5	17				
Illness	Dropouts	31		29				11	1.29	0.00	2
	Repeaters	43		31				9			
Others	Dropouts	26		36		9			8.62*	0.15	2
	Repeaters	49		24		10					

[1]Some cells were combined due to small frequencies: 1-None; 2-Minor; 3-Moderate; 4-Major; (1+2)-None-Minor; (2+3+4)-Minor-Moderate-Major; (3+4)-Moderate-Major.

*Significant at 0.05 level.

TABLE XXVIII

DISTRIBUTION OF RESPONSES OF DROPOUTS AND REPEATERS AS TO DEGREE OF THEIR SATISFACTION WITH SOME ASPECTS OF THEIR INSTITUTIONS

College Features	Student Group	Degree of Satisfaction[1]									χ^2	λ	df
		1	(1 + 2)	2	(2 + 3)	3	(3 + 4)	(2 + 3 + 4)	4	(4 + 5)			
Student Services	Dropouts	0		41			30				14.23*	0.02	2
	Repeaters	15		40			28						
Academic Advisors	Dropouts		24				47				1.10	0.00	1
	Repeaters		36				47						
Library Services	Dropouts	12		34		25					5.48	0.03	2
	Repeaters	27		36		20							
Number of Students	Dropouts				38					33	0.01	0.00	1
	Repeaters				45					38			
School Rules and Regulations	Dropouts			26			45				2.85	0.06	2
	Repeaters			19			64						
Extracurricular Activities	Dropouts		62			9					2.56	0.00	1
	Repeaters		63			20							
Intellectual Stimulation	Dropouts		35				36				3.80	0.06	1
	Repeaters		27				56						
Cultural Opportunities	Dropouts		16				55				2.28	0.01	1
	Repeaters		29				54						
Social Opportunities	Dropouts				64					7	0.16	0.00	1
	Repeaters				72					11			
Recreational Facilities	Dropouts	50						21			0.17	0.00	1
	Repeaters	62						21					
Campus Location	Dropouts		4			37				30	0.17	0.00	2
	Repeaters		6			42				35			
Living Accommodations	Dropouts			9		58			4		7.77*	0.05	2
	Repeaters			16		52			15				
Grading System	Dropouts			18			53				1.20	0.04	1
	Repeaters			14			69						

[1]Some cells were combined due to small frequencies: 1-None; 2-Little; 3-Moderate; 4-Much; 5-Great; (1+2)-None-Little; (2+3)-Little-Moderate; (3+4)-Moderate-Much; (2+3+4)-Moderate-Much-Great; (4+5)-Much-Great.

*Significant at 0.05 level.

TABLE XXIX

t-VALUES BETWEEN PERCEPTIONS OF DROPOUTS AND REPEATERS ON THE RELATIVE IMPORTANCE OF REASONS FOR DROPPING OR REPEATING

Reason for Dropping Out or Repitition	Student Group	$\bar{X}$	s	n	t	df
Low grades	Dropouts	3.408	0.919	71	3.96*	152
	Repeaters	3.843	0.366	83		
Difficult courses	Dropouts	2.592	0.729	71	3.50*	152
	Repeaters	3.000	0.716	83		
Study Habits	Dropouts	2.239	0.547	71	0.73	152
	Repeaters	2.301	0.512	83		
Course dissatisfaction	Dropouts	1.915	0.603	71	0.33	152
	Repeaters	1.880	0.722	83		
Conflict with job	Dropouts	2.070	1.019	71	0.87	152
	Repeaters	1.928	0.997	83		
Inadequate job	Dropouts	1.732	0.774	71	0.45	152
	Repeaters	1.675	0.783	83		
Insufficient money	Dropouts	2.155	1.167	71	0.40	152
	Repeaters	2.084	1.038	83		
Financial Aid unavailable	Dropouts	1.310	0.872	71	0.59	152
	Repeaters	1.241	0.576	83		
Insufficient financial aid	Dropouts	1.535	0.954	71	2.50*	152
	Repeaters	1.952	1.092	83		
Financial aid ended	Dropouts	1.014	0.119	71	2.68*	152
	Repeaters	1.193	0.551	83		
Study time too demanding	Dropouts	2.845	0.624	71	0.20	152
	Repeaters	2.867	0.694	83		
Family responsibility	Dropouts	2.549	1.263	71	2.52*	152
	Repeaters	2.060	1.141	83		
Illness	Dropouts	1.775	0.848	71	1.20	152
	Repeaters	1.590	0.681	83		
Others	Dropouts	1.761	0.665	71	1.48	152
	Repeaters	1.530	0.704	83		

*Significant at 0.05 level.

TABLE XXX

t-VALUES BETWEEN PERCEPTIONS OF DROPOUTS AND REPEATERS ON THE DEGREE OF THEIR SATISFACTION WITH SOME ASPECTS OF THEIR INSTITUTIONS

Institutional Aspects	Student Group	$\bar{X}$	s	n	t	df
Student Services	Dropouts	2.437	0.527	71	13.38*	150
	Repeaters	3.831	0.730	83		
Academic advisors	Dropouts	2.662	0.476	71	9.10*	150
	Repeaters	3.458	0.591	83		
Library services	Dropouts	2.183	0.703	71	16.11*	150
	Repeaters	4.084	0.752	83		
Rules and regulations	Dropouts	2.648	0.510	71	6.05*	150
	Repeaters	3.157	0.529	83		
Number of students	Dropouts	3.437	0.554	71	8.92*	150
	Repeaters	2.530	0.687	83		
Extracurricular activities	Dropouts	2.099	0.384	71	24.54*	150
	Repeaters	3.771	0.451	83		
Intellectual stimulation	Dropouts	2.507	0.557	71	9.73*	150
	Repeaters	3.337	0.501	83		
Cultural opportunities	Dropouts	2.803	0.524	71	6.18*	150
	Repeaters	3.325	0.521	83		
Social opportunities	Dropouts	3.000	0.447	71	1.70*	150
	Repeaters	2.880	0.425	83		
Recreational facilities	Dropouts	1.366	0.660	71	34.22*	150
	Repeaters	4.711	0.553	83		
Campus location	Dropouts	3.380	0.618	71	6.97*	150
	Repeaters	2.651	0.671	83		
Living accommodations	Dropouts	2.930	0.425	71	0.95	150
	Repeaters	3.012	0.615	83		
Grading system	Dropouts	2.775	0.484	71	4.56*	150
	Repeaters	3.120	0.453	83		

*Significant at 0.05 level.

In Table XXVII the χ^2 values showing significance in the degree of dissatisfaction of dropouts and repeaters with some components of their institutions were from student services and living accommodations, indicating they were not satisfied with these institutional features. Improvement in the predictive value of the degree of satisfaction with their corresponding values were on school rules and regulations and intellectual stimulation (both 6%), followed by living accommodations (5%), and grading system (4%). The other institutional aspects had values of one to three per cent. The lowest improvement on predictability was on academic advisors, number of students, extracurricular activities, social opportunities, recreational facilities and campus location, with values of zero.

As indicated in Table XXIX, significantly more repeaters than dropouts were inclined to believe that low grades and difficult courses were dominant reasons for repeating while insufficient or cutting off of financial aid were less dominant reasons for repetition.

Table XXX shows that repeaters had a significantly higher degree of satisfaction than dropouts, in terms of their mean responses, with student services and academic advisors.

Summary

Chapter IV presented the results of the study dealing with rates of graduation, dropping out and repetition. It

also discussed the cost of graduates and economic wastage due to dropping out and repetition in four Venezuelan teachers colleges. Finally, the chapter presented the evaluation of the perceptions of dropouts and repeaters about their life experiences while in college.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a concise summary of the findings, some conclusions reached from the study and some recommendations arising from the investigation. Some of these recommendations are directed toward minimizing dropping out and repetition in college.

Summary

The main objectives of this study were (1) to determine the rates of students graduating, dropping out and repeating in selected Venezuelan teachers colleges; (2) to assess the cost or educational loss due to the dropping out and repetition; and (3) to measure the perceptions of dropouts and repeaters concerning their experiences in the teachers colleges and utilize these perceptions in formulating recommendations for reducing the rates of dropouts and repeaters.

Involved in this study were the Instituto Universitario Pedagogico de Caracas (IUPC), the Instituto Universitario Pedagogico Experimental de Barquisimeto (IUPEB), the Instituto Universitario Pedagogico Experimental de Maracay (IUPEMAR) and the Instituto Universitario Pedagogico

Experimental de Maturin (IUPEM).

Information used in calculating the cost of graduates, dropouts and repeaters in the colleges under study was obtained from the various Registrar's Offices (for enrollment, dropouts and repeaters) and from the Budget Offices of the colleges (for annual appropriation of the college). Information on the perceptions of dropouts and repeaters about their experiences in college was obtained through separate questionnaires prepared for dropouts and repeaters.

Samples for this study were randomly drawn from the dropouts and repeaters belonging to cohorts of 1970-74, 1971-75 and 1972-76. The samples for dropouts and repeaters were drawn in a manner which tended to insure representativeness from each population. Out of these samples the number of interviewees to be contacted were determined for each college, based on the completeness of their home addresses and their proximity to the campus of the college where they enrolled.

From a subpopulation of 1,500 dropouts at Caracas Teachers College, 1.9 per cent were contacted. At Barquisimeto Teachers College, from a subpopulation of 335 dropouts, 7.2 per cent were interviewed. The interviewees from dropouts at Maracay Teachers College comprised 4.9 per cent of a subpopulation of 162. At Maturin Teachers College, out of a subpopulation of 68 dropouts, 16.2 per cent were interviewed. From all the colleges, 3.4 per cent of a total subpopulation of 2,065 dropouts were contacted.

For the repeaters, the respondents interviewed were 1.4 per cent of a subpopulation of 2,347 at Caracas Teachers College; 1.8 per cent from a subpopulation of 1,520 repeaters at Barquisimeto Teachers College; 5.8 per cent from a subpopulation of 190 repeaters at Maracay Teachers College; and 7.3 per cent from a subpopulation of 179 repeaters at Maturin Teachers College. Of the total 4,236 subpopulation from all four colleges, 2.0 per cent were contacted.

In view of the fact that the actual numbers of interviewees for dropouts and repeaters in this study are small, caution should be made in extrapolating the findings and conclusions. Thus, the conclusions drawn from the study may be applicable only to those segments of the populations constituting the sample sizes, and may not be valid for the populations of dropouts and repeaters in the teachers colleges of Venezuela.

The findings of the study are:

1. The average rates of non-repeater graduates were 9.6 per cent at Caracas Teachers College; 4.3 per cent at Barquisimeto Teachers College; none at Maracay Teachers College; and 49.4 per cent at the teachers college in Maturin. The average rates of five-year repeater graduates were 19.4 per cent at Caracas; 17.8 per cent at Barquisimeto; 42.1 per cent at Maracay; and 19.9 per cent at Maturin. Six-year graduates averaged 16.4 per cent at Caracas and 7.4 per cent at Barquisimeto. At Caracas the seven-year graduates comprised 7.8 per cent and at Barquisimeto, 4.3 per cent.

There were no six- and seven-year graduates at Maracay and Maturin included in the study.

In all the colleges, involved, the average four-year graduates was 11.8 per cent; five-year graduates, 21.6 per cent; six-year graduates, 7.0 per cent; and seven-year graduates, 1.3 per cent. The over-all rate of graduation in all colleges was 40.7 per cent during the period of study.

2. First-year dropouts averaged 21.9 per cent at IUPC; 15.4 per cent in IUPEB; 26.0 per cent at IUPEMAR; and 10.9 per cent at IUPEM. The average rates of second-year dropouts were 7.1, 1.7, 0.5 and 1.0 per cent at IUPC, IUPEB, IUPEMAR and IUPEM, respectively. Dropouts during the third year averaged 3.5 per cent at IUPC; 0.5 at IUPEB; 0.2 at IUPEMAR; and 1.0 at IUPEM. During the fourth year, the average dropouts were 3.2, 0.3, 0.0 and 0.0 per cent for IUPC, IUPEB, IUPEMAR and IUPEM, respectively. In all colleges the average percentages of yearly dropouts were 18.6, 2.8, 1.3 and 0.9 for the first, second, third and four years, respectively. The over-all rate of dropouts in all colleges was 25.2 per cent during the period of study.

3. Repetition during the first year averaged 33.3 per cent at IUPC; 16.9 at IUPEB; 25.5 at IUPEMAR; and 19.5 at IUPEM. The average percentages of repeaters during the second year were 12.6 at Caracas; 16.6 at Barquisimeto; 3.0 at Maracay; and 7.2 at Maturin. Repeaters during the third year averaged 6.1 per cent at Caracas; 8.2 at IUPEB; 1.8 at Maracay; and 6.4 at Maturin. During the fourth year, the

repeaters averaged 6.3, 15.8, 1.0 and 3.7 per cet for IUPC, IUPEB, IUPEMAR and IUPEM, respectively. In all colleges, the average percentages of repeaters were 23.8, 9.8, 5.6 and 6.7 during the first, second, third and fourth years, respectively. The over-all rate of repetition in all colleges was 51.8 per cent during the period of study.

4. The average cost per non-repeater graduate was $5,765 at IUPC; $4,970 at IUPEB; and $9,625 at IUPEM. There were no four-year graduates at IUPEMAR. The average costs per five-year graduate at these colleges were $7,467, $5,788, $8,622 and $10,995 for IUPC, IUPEB, IUPEMAR and IUPEM, respectively. The costs per six-year graduate averaged $8,918 at IUPC and $6,406 at IUPEB. Seven-year graduates had an average per capita cost of $10,319 and $7,228 at IUPC and IUPEB, respectively. There were no six- and seven-year graduates at IUPEMAR and IUPEM. In all colleges the average costs per four-, five-, six- and seven-year graduates were $6,787, $8,218, $7,662 and $8,774, respectively. The average cost per graduate in all categories at all colleges was $7,860. The total costs of all graduates in all colleges were $5,801,926, $12,326,659, $3,908,346 and $1,033,040 for the four-, five-, six- and seven-year graduates. The grand total cost of all graduates in the four colleges was $23,822,155 for the 3,326 who graduated during the period of study.

5. The average per capita wastages due to dropping out at IUPC were $1,235, $1,348, $1,521 and $1,566 during the

first, second, third and fourth years, respectively. At IUPEB the average wastages per dropout were $1,079 in the first year; $1,100 in the second; $1,095 in the third; and $1,056 in the fourth year. In IUPEMAR, the per capita wastages due to dropouts in the first, second, third and fourth years were $608, $1,245, $1,966 and $8,167, respectively. The average wastages per dropout at IUPEM were $488 in the first year; $943 in the second; $1,438 in the third; and $2,352 in the fourthe year. The average per capita dropout wastages of all colleges were $852, $1,159, $1,505 and $3,309 for the first, second, third and fourth years, respectively. Wastages due to dropping out in these colleges were $2,123,601, $909,390, $727,903 and $632,541 during the first, second, third and fourth years, respectively. The total wastage due to dropping out in all categories at all colleges was $4,393,435 for 2,065 dropouts, or an average of $2,128 per dropout.

6. Wastage due to repetition at IUPC averaged $1,234, $1,348, $1,521 and $1,660 per repeater at the end of the first, second, third and fourth years, respectively. At IUPEB, the corresponding figures were $1,150, $1,041, $1,045 and $1,136 per repeater. In IUPEMAR the wastage per repeater averaged $2,812, $1,884, $1,777 and $1,228 for the first, second, third and fourth years, respectively. The corresponding figures at IUPEM were $3,812, $2,211, $2,024 and $1,578. In all colleges the wastages incurred by

repeaters were $2,929,006, $1,237,629, $922,319 and $615,785 for repeating at the end of the first, second, third and fourth years, respectively. The total wastage due to repetition at the four colleges was $5,541,591 for the 4,236 who repeated in all curriculum years, or a cost of $1,308 per repeater per year.

7. The dominant reasons given for dropping out and repetition were low grades and difficult courses. Inadequate financial support was regarded as of minor importance in dropping out or repeating.

8. Student services comprised the least satisfactory feature in the colleges as perceived by dropouts and repeaters.

9. Low grades, difficult courses, conflict between job and studies and illness had the same rank as reasons for dropping out or for repeating.

10. The other variables differed in their rankings by dropouts and repeaters, indicating that these two groups of students have varying perceptions and feeling of satisfaction about them.

Conclusions

From this study the following conclusions can be drawn:

1. From a total population of 2,282 entering students at the teachers colleges, 25.2 per cent dropped out and 51.8

per cent repeated at least one time. This means that about twice as many more students repeated courses than dropped out of college. As a result, repetition is the more extensive problem than dropping out in Venezuela.

2. Only 10.8 per cent of the entering students graduated in four years, i.e., without losing time. Since this is a very low percentage, the colleges are wasting a substantial proportion of their economic and human resources.

3. The greatest percentage of dropouts occurred at Caracas Teachers College (72.6). This seems to imply that at this college the influence of the different variables which induce students to leave school is greater than in the other colleges.

4. Repeater rates are relatively high and approximately the same at Caracas and Barquisimeto with 55.3 per cent and 53.7 per cent, respectively. Repeater rates were relatively low and approximately equal at Maracay and Maturin with 31.2 per cent and 36.6 per cent, respectively. This could mean that factors which induce repetition were more intense at Caracas and Barquisimeto than at Maracay and Maturin.

5. Mathematics and Physics are the fields where the greatest rate of repeaters and dropouts occurred.

6. There is no substantial difference in the cost of graduates, dropouts and repeaters between institutions.

7. Economic wastage due to dropping out and repetition constitute about 40 per cent of the annual appropriations

of the colleges under study. This represents a serious drain of economic resources.

8. Findings about some variables that may cause a student to drop out such as low grades and difficult courses are in accordance with some of the findings in the literature reviewed.

9. Dropouts and repeaters gave similar responses for dropping out or repeating and in their degree of satisfaction with some aspects of the teachers colleges.

Recommendations

The following recommendations have arisen from this study:

1. More attention should be given to the selection of students who go to teachers colleges in Venezuela. Entrance examinations should be given to all prospective college students in order to admit only those who have the capacity to carry a full academic load without so much risk of dropping out or repeating.

2. Serious efforts should be exerted by Venezuelan educators to identify and assist potential dropouts and repeaters so that dropping out and repetition can be minimized. Toward this end, the student services must be filled with capable men and women who have appropriate qualifications for their positions. Improved counseling programs should also be instituted in the secondary schools to guide high school graduates more effectively in their choice of

professions.

3. Programs to improve the quality of teachers and teaching in colleges must be set to improve effectiveness in instruction. Teachers on the job who lack educational qualifications must be given some form of financial aid to complete their education. Those who have the capability for further or advanced studies should be encouraged to study through expanded scholarship programs. In-service training of teachers should be instituted periodically or as the need arises.

4. A more exhaustive study of teachers colleges is more appropriate in higher education involving greater sample sizes with more follow-ups of those who dropped out and repeated on an individual basis. Non-repeater graduates should also be included in the survey on students' perceptions concerning their experiences as college students.

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APPENDIX A

QUESTIONNAIRE FOR DROPOUTS

CONFIDENTIAL QUESTIONNAIRE FOR NONRETURNING STUDENTS

No. ___

1. Institution's name _____

2. Student's name _____
   Last First M.I.

3. Home address _____

   City _____ State _____

4. Date of birth _____
   Month Day Year

5. Sex: [ ] Female [ ] Male

6. Which one of the following specializations were you enrolled at the time you left the teachers college? Check one.

___(1) Basic Cycle	___(8) Math & Acctg.	__(15) Span. & Lit.
___(2) Biology	___(9) Math & Phys.	
___(3) Physics	__(10) Phys. Edu.	__(16) English
___(4) Chemistry	__(11) Agriculture	__(17) Soc. Sci.
___(5) Biol. & Chem.	__(12) Bus. Edu.	__(18) French
___(6) Earth Science	__(13) Indus. Edu.	__(19) Sp. Edu.
___(7) Math	__(14) Home Econ.	__(20) Pedagogy

7. How long were you enrolled before you left the teachers college? Check one.

___(1) Less than 1 semester
___(2) 1 sem. or more but less than 1 yr.
___(3) 1 yr. or more but less than 2 yr.
___(4) 2 yr. or more but less than 3 yr.
___(5) 3 yr. or more

8. How many months has it been since you withdrew from the teachers college? Check one.

___(1) 1 month or less
___(2) 2 to 6 months
___(3) 7 months to 1 yr.
___(4) More than 1 yr.

9. What semester were you enrolled at the time you left? Check one.

___(1) 1st semester	___(4) 4th semester	___(7) 7th sem.
___(2) 2nd semester	___(5) 5th semester	___(8) 8th sem.
___(3) 3rd semester	___(6) 6th semester	

10. During the last two semesters or less that you were enrolled were you primarily a (Check one)

___(1) full-time student?
___(2) part-time student?
___(3) both during the last two semesters?

11. During the last two semesters or less that you were enrolled were you employed? Check one.

___(1) Not employed
___(2) Employed 1-10 hr/week
___(3) Employed 11-20 hr/week
___(4) Employed 21-35 hr/week

12. Which of the following types of financial aid were you receiving at any time during the last two semesters? Check one.

___(1) None ___(3) Loan
___(2) Scholarship ___(4) Others

13. What was your cumulative overall grade point average (GPA) at the time you left school (based on a 20.0 system)? ____

14. How many times did you change field of specialization before dropping out? Check one.

___(1) Never ___(2) One time ___(3) Two or more times

15. Listed below are several reasons why a student may leave college. To what extent are these your reasons for leaving college? Check one.

	Major (4)	Moderate (3)	Minor (2)	Not Imp. (1)
Academic				
(1) Low grades	___	___	___	___
(2) Courses too difficult	___	___	___	___
(3) Poor study habits	___	___	___	___
(4) Dissatisfaction with courses	___	___	___	___
(5) Courses irrelevant to my goal	___	___	___	___
(6) Universities give more prestige than teachers colleges	___	___	___	___
Employment				
(7) Conflict between job & studies	___	___	___	___
(8) Couldn't find a job to fit my class schedule	___	___	___	___
(9) I wanted to go to work	___	___	___	___
Financial Status				
(10) Not enough money to finance studies in college	___	___	___	___
(11) Couldn't obtain financial aid	___	___	___	___
(12) Financial aid insufficient	___	___	___	___
(13) Financial aid terminated	___	___	___	___
Personal				
(14) Studies too time-consuming	___	___	___	___
(15) Family responsibilities too taxing	___	___	___	___
(16) Illness, personal or in family	___	___	___	___
(17) Marital situation changed my educational plan	___	___	___	___
(18) Moved out of the area	___	___	___	___
Other Reasons	___	___	___	___

16. Please check the appropriate box describing your degree of satisfaction with the following aspects of the college you left.

	Degree of Satisfaction				
	None (1)	Little (2)	Moder. (3)	Much (4)	Great (5)
(1) Counseling services	___	___	___	___	___
(2) Academic advisement services	___	___	___	___	___
(3) Library services	___	___	___	___	___
(6) School rules & regulations	___	___	___	___	___
(7) Intellectual stimulation	___	___	___	___	___
(8) Cultural opportunities	___	___	___	___	___
(9) Social opportunities	___	___	___	___	___
(10) Recreational facilities	___	___	___	___	___
(11) Location of college	___	___	___	___	___
(12) Living accommodations	___	___	___	___	___
(13) Grading system	___	___	___	___	___
(14) Course content of field of specialization	___	___	___	___	___
(15) Quality of teaching in field of specialization	___	___	___	___	___
(16) Contact with teachers	___	___	___	___	___
(17) Scheduling of classes	___	___	___	___	___
(18) Preenrollment information	___	___	___	___	___
(19) Quality of students	___	___	___	___	___
(20) Quality of teachers	___	___	___	___	___
(21) Quality of administrators	___	___	___	___	___
(22) Quality of teachers in the college in gen.	___	___	___	___	___

17. What are you currently doing? Check all that apply.

___(1) Attending another institution of higher learning — School: _____
___(2) Looking for a job
___(3) Working in a job
___(4) Caring for home/family
___(5) Others (specify)

18. What do you plan to do in the future? Check all that apply.

___(1) Go back to the same college
___(2) Attend another institution of higher education — School: _____
___(3) Continue doing what I am coing now
___(4) Others (specify)

APPENDIX B

QUESTIONNAIRE FOR REPEATERS

CONFIDENTIAL QUESTIONNAIRE FOR REPEATING STUDENTS

No. ___

1. Name of institution _____

2. Student's name _____
   Last First M.I.

3. Home address _____

   City _____ State _____

4. Date of birth _____
   Month Day Year

5. Sex: [ ] Female [ ] Male

6. Which of the following specializations were you enrolled in at the time you repeated any course in college? Check one.

___(1) Basic Cycle	___(8) Math & Acctg.	__(15) Span. & Lit.
___(2) Biology	___(9) Math & Phys.	
___(3) Physics	__(10) Phys. Edu.	__(16) Soc. Sci.
___(4) Chemistry	__(11) Agriculture	__(17) English
___(5) Biol. & Chem.	__(12) Bus. Edu.	__(18) French
___(6) Earth Science	__(13) Indus. Edu.	__(19) Sp. Edu.
___(7) Math	__(14) Home Econ.	__(20) Pedagogy

7. Which semester did you repeat? Check one.

___(1) 1st semester	___(4) 4th semester	___(7) 7th sem.
___(2) 2nd semester	___(5) 5th semester	___(8) 8th sem.
___(3) 3rd semester	___(6) 6th semester	___(9) 9th sem.

8. During the semester(s) that you repeated were you primarily (Check one) a

   ___(1) full-time student? ___(3) both?
   ___(2) part-time student?

9. During the semester(s) that you repeated were you employed? Check one.

___(1) Not employed at all	___(4) Employed 21-36 hr/week
___(2) Employed 1-10 hr/week	
___(3) Employed 11-20 hr/week	___(5) Employed 36 or more hr/week

10. Which of the following type(s) of financial aid were you receiving at the time you repeated? Check one.

    ___(1) None ___(2) Scholarship ___(3) Loan ___(4) Others

11. How many times did you change specialization while enrolled? Check one.

    ___(1) Never ___(2) One time ___(3) Two or more times

12. Listed below are probable reasons why a student may repeat any course in college. To what extent are these your reasons for repeating any course? Check one.

	Maj. (4)	Mod. (3)	Min. (2)	Not (1)
(1) Low grades	___	___	___	___
(2) Courses too difficult	___	___	___	___
(3) Poor study habits	___	___	___	___
(4) Dissatisfaction with courses	___	___	___	___
(5) Conflict between job & studies	___	___	___	___
(6) Couldn't find a job to fit my study schedule	___	___	___	___
(7) Not enough financial support	___	___	___	___
(8) Couldn't obtain financial aid	___	___	___	___
(9) Financial aid insufficient	___	___	___	___
(10) Financial aid terminated	___	___	___	___
(11) Study too time-consuming	___	___	___	___
(12) Family responsibility too great	___	___	___	___
(13) Illness, personal or in family	___	___	___	___
(14) Personal problems	___	___	___	___
(15) Problems with teacher(s)	___	___	___	___
(16) Others	___	___	___	___

13. Please check the appropriate box describing your degree of satisfaction with the following aspects of the college where you repeated.

	Degree of Satisfaction				
	None (1)	Little (2)	Moder. (3)	Much (4)	Great (5)
(1) Counseling services	___	___	___	___	___
(2) Academic advisement services	___	___	___	___	___
(3) Library services	___	___	___	___	___
(4) School rules & regulations	___	___	___	___	___
(5) Enrollment size of college	___	___	___	___	___
(6) Extracurricular opportunities	___	___	___	___	___
(7) Intellectual stimulation	___	___	___	___	___
(8) Cultural opportunities	___	___	___	___	___
(9) Soc. opportunities	___	___	___	___	___
(10) Recreat. opport.	___	___	___	___	___
(11) Location of college	___	___	___	___	___
(12) Living accommodations	___	___	___	___	___
(13) Grading system	___	___	___	___	___

APPENDIX C

CONFIDENTIAL QUESTIONNAIRE FOR NONRETURNING STUDENTS OF THE WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION (WICHE)

(NAME OF INSTITUTION)
CONFIDENTIAL QUESTIONNAIRE FOR
NONRETURNING STUDENTS

1. Name _____ _____ ___ _____ ____
   Last First M.I. Month Year
2. Home Street Address _____
   City _____ State _____ Zip Code_____
3. Student ID Number_____
4. Date of Birth_____ ____
   Month Year
5. Sex:___(1) Female ___(2) Male
6. Civil Rights Category (PLEASE CHECK ONE)
   ___(1) American Indian or Alaska Native
   ___(2) Asian or Pacific Islander
   ___(3) Black/Negro
   ___(4) Hispanic
   ___(5) White, other than Hispanic
7. Marital Status (PLEASE CHECK ONE)
   ___(1) Not married, no children
   ___(2) Not married, with children
   ___(3) Married, no children
   ___(4) Married, with children
8. If married, is spouse a student? ___(1) Yes ___(2) No
9. Are you a veteran? ___(1)Yes ___(2) No
10. Please briefly describe the reasons why you left school.

_____
_____
_____

11. Which one of the following degrees or certificates were you working toward at the time you left school? (PLEASE CHECK ONE)
   ___(1) Certificate
   ___(2) Diploma (other than those listed below)
   ___(3) Associate degree
   ___(4) Bachelor's degree
   ___(5) Master's degree
   ___(6) Professional degree (includes only dentistry, medicine, optometry, osteopathy,pediatry, veterinary medicine, law and theology)
   ___(7) Doctor's degree (e.g., Ph.D., Ed.D., D.B.A.)
   ___(8) Special Student
12. How long were you enrolled before you left school? (PLEASE CHECK ONE)
   ___(1) Less than one semester
   ___(2) One semester, but less than one year
   ___(3) One year or more but less than two years
   ___(4) Two years or more, but less than three years
   ___(5) Three years or more

13. How many months has it been since you withdrew from school? (PLEASE CHECK ONE)

___(1) One month or less
___(2) Two to six months
___(3) Seven months to one year
___(4) More than one year

14. What was your status at the time you left? (PLEASE CHECK ONE)

___(1) Freshman ___(2) Sophomore ___(3) Junior
___(4) Senior ___(5) Graduate or Professional School
___(6) Special Student
Student

15. During the last two semesters (or less) that you were enrolled, were you primarily: (PLEASE CHECK ONE)

___(1) A full-time student
___(2) A part-time student
___(3) Both during the last two semesters

16. During the last two semesters (or less) that you were enrolled were you employed in a job: (PLEASE CHECK ONE)

___(1) Not employed at all
___(2) Employed 1-10 hours/week
___(3) Employed 11-20 hours/week
___(4) Employed 21-35 hours/week
___(5) Employed 36 or more hours/week

17. Which of the following types of financial aid were you receiving at any time during the last wo semesters (or less): (CHECK ALL THAT APPLY)

___(1) None ___(2) Scholarship ___(3) Loan
___(4) Work/study ___(5) GI Bill ___(6) Other, (please specify _____

18. What was your cumulative overall grade point average (GPA) at the time you left school (based on a 4.0 system)? (PLEASE FILL IN) _____

19. Were you ever on academic probation while enrolled? (PLEASE CHECK ONE)

___(1) Yes ___(2) No

20. What was your last major? _____
If major undeclared, check here _____

21. How many different times did you change majors while enrolled? (PLEASE CHECK ONE)

___(1) Never declared a major field of study
___(2) Never changed majors
___(3) One time
___(4) Two or more times

22. Listed below are several reasons why a student might leave school. To what extent are these your reasons for leaving this school? (CHECK THE APPROPRIATE RESPONSE)

	Major Reason (4)	Moder. Reason (3)	Minor Reason (2)	Not a Reason (1)
Academic				
(1) Low grades	___	___	___	___
(2) Found courses too difficult	___	___	___	___
(3) Inadequate study techniques or habits	___	___	___	___
(4) Needed a temporary break from studies	___	___	___	___
(5) Major or courses not available at this school	___	___	___	___
(6) Unsure of major and needed to leave school to decide on possible careers	___	___	___	___
(7) Course work not challenging	___	___	___	___
(8) Learned what I came to learn	___	___	___	___
(9) Dissatisfaction with major department	___	___	___	___
Employment				
(10) Conflict between job and studies	___	___	___	___
(11) Accepted a job and didn't need more school	___	___	___	___
(12) Went into military service	___	___	___	___
(13) Couldn't find a job	___	___	___	___
Financial				
(14) Not enough money to go to school	___	___	___	___
(15) Applied but could not obtain financial aid	___	___	___	___
(16) Financial aid was not sufficient	___	___	___	___
(17) Child care not available or too costly	___	___	___	___
(18) This school too expensive	___	___	___	___
Personal Circumstances				
(19) Found study too time-consuming	___	___	___	___
(20) Home responsibilities were too great	___	___	___	___

	Major Reason (4)	Moder. Reason (3)	Minor Reason (2)	Not a Reason (1)
Personal Circumstances				
(21) Illness, personal or family	___	___	___	___
(22) Personal problems	___	___	___	___
(23) Fulfilled my personal goals in schooling	___	___	___	___
(24) Marital situation changed my education plans	___	___	___	___
(25) Moved out of the area	___	___	___	___
Other, (please specify)	___	___	___	___

23. Please check the appropriate box describing your degree of satisfaction with the following aspects of the school you left.

	Degree of Satisfaction					
	None	Lit-tle	Mode-rate	Much	Great	Does Not Apply
(1) Counseling/guidance services	___	___	___	___	___	___
(2) Academic advising services	___	___	___	___	___	___
(3) Library services	___	___	___	___	___	___
(4) Employment opportunities	___	___	___	___	___	___
(5) Financial aid opportunities	___	___	___	___	___	___
(6) Cost of attending this school	___	___	___	___	___	___
(7) Enrollment size of this school	___	___	___	___	___	___
(8) Rules and regulations at this sch.	___	___	___	___	___	___
(9) Extracurricular opportunities	___	___	___	___	___	___
(10) Intellectual stimulation	___	___	___	___	___	___
(11) Cultural opportunities	___	___	___	___	___	___
(12) Social opportunities	___	___	___	___	___	___
(13) Religious environment	___	___	___	___	___	___
(14) Recreational facilities	___	___	___	___	___	___
(15) Location of this school	___	___	___	___	___	___
(16) Residence/living accommodations	___	___	___	___	___	___

	None	Lit-tle	Mode-rate	Much	Great	Does Not Apply
(17) Grading system	____	____	____	____	____	____
(18) Course content in your major field	____	____	____	____	____	____
(19) Teaching in your major field	____	____	____	____	____	____
(20) Amount of contact with your teachers	____	____	____	____	____	____
(21) Scheduling of classes	____	____	____	____	____	____
(22) Relevance of your maj. field to your career goals	____	____	____	____	____	____
(23) Information given to your about this sch. before enrolling	____	____	____	____	____	____
(24) Quality of students	____	____	____	____	____	____
(25) The school in general	____	____	____	____	____	____

24. Please select from the list above three factors which, if changed for the better, would have most encouraged you to stay at (INSTITUTION). (LIST IN ORDER OF IMPORTANCE)
1. _____ 2. _____ 3. _____

25. What are you currently doing? (CHECK ALL THAT APPLY)

___(1) Attending or plan to attend school soon _____ (Name)
_____ (of Institution)
___(2) Entered or plan to enter military service
___(3) Looking for a job
___(4) Working on a job
___(5) Caring for home and/or family
___(6) Traveling
___(7) Other, (Please specify) _____

Optional Items

1. For community colleges, item 11 might be replaced by:

What program were you enrolled in? (PLEASE CHECK ONE)
___(1) Certificate program
___(2) A.A degree program
___(3) Neither, only enrolled in selected courses

2. For community colleges, the following two items might be added:

What is the highest degree you currently hold? (PLEASE CHECK ONE)

___(1) GED equivalency
___(2) High school diploma
___(3) Associate degree
___(4) Bachelor's degree
___(5) Master's degree
___(6) Professional degree (includes only dentistry, medicine, optometry, osteopathy, podiatry, veterinary medicine, law, and theology)
___(7) Doctor's degree (e.g., Ph.D., Ed.D., D.B.A.)
___(8) I have no degree or diploma

Which one of the following was your primary reason for attending sch001? (PLEASE CHECK ONE)

___(1) to complete deficiencies in order to transfer
___(2) to prepare for GED
___(3) to complete first two years of college in preparation for transferring to a 4-year college
___(4) to complete high school
___(5) to upgrade my skills
___(6) to learn a new skill
___(7) for personal enrichment: fun, achievement, etc.
___(8) to prepare for a professional examination: real estate, nursing, etc.
___(9) Other, please specify _____

3. For item 18, cumulative GPA, an alternative wording that lists categories of GPA rather than having the respondent write in his or her GPA is:

What was your cumulative overall grade point average (GPAO at the time you left school? (PLEASE CHECK ONE)

___(1) 1.00 or less ___(2) 1.01-1.50 ___(3) 1.51-2.00
___(4) 2.01-2.50 ___(5) 2.51-3.00 ___(6) 3.01-3.50
___(7) 3.51-4.00

APPENDIX D

LETTER REQUESTING PERMISSION TO USE AND MODIFY THE WICHE INSTRUMENT

Oklahoma State University
DEPARTMENT OF ADMINISTRATION AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74074
GUNDERSEN HALL
(405) 372-6211, EXT. 6245

August 4, 1978

The Director
National Center for Higher Education
Management Systems at Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colorado 80302

Dear Sir:

This is the follow-up of our telephone conversation regarding my request for approval to use and modify the survey questionnaire (Appendix A) in A Manual for Conducting Attrition Studies in Institutions of Postsecondary Education. I would like approval from you to allow me to use such instrument in the following manner.

1. Use it in connection with my dissertation on attrition study of Venezuelan college students.
2. Make modifications on the instrument to suit to Venezuelan conditions.
3. Append the original instrument to my dissertation for comparison with the modified form.

I need the written approval at the earliest possibility.

Thank you so much.

Sincerely yours,

Cruz Daniel Zambrano

Cruz Daniel Zambrano

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APPENDIX E

LETTER FROM THE VICE-PRESIDENT FOR ACADEMIC AFFAIRS OF OKLAHOMA STATE UNIVERSITY TO THE VICE-MINISTER OF EDUCATION IN VENEZUELA REQUESTING PERMISSION AND HELP FOR THIS INVESTIGATOR TO COLLECT DATA FOR THIS STUDY

Oklahoma State University
OFFICE OF THE PRESIDENT

STILLWATER, OKLAHOMA, 74074
WHITEHURST HALL
(405) 372-6211, EXT. 261

May 13, 1977

Professor Gerardo Cedeño
Vice Minister of Education
Caracas, Venezuela

Dear Professor Cedeño:

This letter is written to initroduce Mr. Cruz Zambrano, who is engaged in doctoral studies in higher education at our institution. At the present time Mr. Zambrano is pursuing his thesis study, which deals with certain aspects of the teachers colleges of Venezuela.

Mr. Zambrano has returned to Venezuela for the summer in order to gather data to support his study. In this connection your assistance could be most valuable to him, and we respectfully solicit it.

We will be groteful for your cooperation in this study, which we feel may be of significant benefit to your country.

Sincerely yours,

James Boggs
Interim President

JHB/lpm

VITA 2

Cruz Daniel Zambrano

Candidate for the Degree of

Doctor of Education

Thesis: A STUDY OF DROPOUTS, REPEATERS, AND ASSOCIATED COSTS IN VENEZUELAN TEACHERS COLLEGES

Major Field: Higher Education

Biographical:

Personal Data: Born in Venezuela, July 21, 1937, the seventh son of Jose and Brigida Zambrano, and married to Edith Loiret, with three daughters: Edith, Daniela and Aurora.

Education: Attended elementary school at Coromoto School, San Cristobal, 1946-1952; attended secondary school at Simon Bolivar High School, San Cristobal, 1954-1959; received the bachelor's degree, Educacion Normal Formacion de Profesores from the Instituto Pedagogico de Caracas, Caracas, Venezuela, 1964; received the degree Master en Ciencias from the Universidad de Carabobo, Valencia, Venezuela, 1975; completed the requirements for the Doctor of Education degree in December, 1978, Oklahoma State University, Stillwater, Oklahoma, USA.

Professional Experiences: Secondary school teacher from 1962 to 1970; secondary school vice-principal, 1965-1967; Teachers College teacher, 1970-1975; Math Department Head, 1970-1971; assistant head of graduate department, 1975.