

THE UNIVERSITY OF MANITOBA
DIFFERENCES BETWEEN COMMUNITY COLLEGE GRADUATES
AND NON-GRADUATES ON THREE DIMENSIONS:
DEMOGRAPHIC VARIABLES, PERSONAL CHARACTERISTICS,
AND STUDENT PERCEPTIONS

BY
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ABSTRACT

The purpose of this study was to investigate, with the use of a questionnaire, some of the self-reported differences between community college graduates and non-graduates with respect to demographic variables, personal characteristics, and student perceptions.

The subjects of this study (N = 250) consisted of a random selection of graduates (N = 125) and non-graduates (N = 125) from the three divisions (Business and Applied Arts, Industrial Technology, and Health Sciences) of Red River Community College, Winnipeg, Canada. These students graduated or should have graduated in June, 1981.

Two hundred and fifty questionnaires were sent during March, 1982 and additional ones were sent to those who did not respond by the end of that month. There was a total of 62.1 percent response rate (74.4% graduates; and 47.6% non-graduates). The tabulation of the results was done by the computer using the SPSS system at the University of Manitoba.

Both descriptive and inferential (t - test) statistics were used in the analyses of the results. The following four demographic variables sex, educational level of sibling, student's pre-community college highest educational level, and average grade during last year of high school showed significant differences between graduates and non-graduates at the 0.05 level. Two variables (program appropriateness, and extra-curricular activities) showed significant differences with respect to personal characteristics.

There were thirty-five variables which showed significant differences between graduates and non-graduates with respect to student's perceptions. Some of these variables included counselling services, informal student-teacher interaction, administration, confidence level and self concept, and classroom management. Informal student-teacher interaction consisted of six separate variables, administration six, and classroom management twelve.

When variables were combined, and the t - test applied, there were significant differences between graduates and non-graduates with respect to demographic variables (six variables combined) and student perceptions (thirty seven variables combined). There was no significant difference between graduates and non-graduates with respect to personal characteristics (six variables combined).

The major reasons given by respondents for withdrawing/not graduating appeared to be school-related problems (lack of interest in school, test failure, boredom with courses, and dislike of courses). The majority of those who had withdrawn indicated a desire to return to school to continue their education.

The results of this study generally supported the findings of several previous studies. Recommendations were derived based on the results and the existing conditions at the college. Implications for this community college and other institutions with similar characteristics have been drawn.

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CHAPTER 1

BACKGROUND TO THE STUDY

Every year thousands of students in the United States and Canada enter post-secondary institutions with the hope of attaining a degree, a certificate or diploma (Iffert, 1957; Medsker, 1960; Astin and Panos, 1967; Harvie and Fair, 1969; Astin, 1975). A few others enter these institutions to satisfy some personal or vocational need that is non-degree, certificate or diploma oriented (Medsker and Tillery, 1971). Unfortunately, all of those students who wish to attain a degree, certificate or diploma do not.

Studies of attrition (dealt with in greater detail later) indicate that while four-year colleges and universities in the United States suffer high attrition rates, the junior college, also referred to as "community college" by Monroe (1970) and Astin (1975), suffers the highest rate of attrition when compared to four-year colleges and universities (Thorton, 1956; Tillery, 1972; Astin, 1975; Yess, 1979). For example, Astin (1975) states: "Of all types of institutions, the public two-year or community colleges consistently show the highest dropout rates (mean of 59 percent)" (p.111), while Yess (1979,p.58) states that community colleges suffer the highest dropout rate among all segments of higher education.

Those who do not graduate do so for several reasons (discussed later). There are some who withdraw voluntarily while others are asked to leave because of academic reasons. There are still a few others who continue but do not graduate because of low grades. Regardless of the reasons for withdrawal and non-graduation, the non-graduate usually suffers a substantial loss in terms of potential earnings and immediate day-to-day living expenses (Astin, 1975). They also suffer psychologically because most are disappointed in themselves and must face the disappointment of family and friends (Cervantes, 1965). The institution and society also lose. First, substantial sums of money are devoted to attracting students in terms of advertisements (radio, television, brochures, "Open Days"), then there are investments of time and energy in teaching, counselling, record maintenance, and other forms of effort to accommodate student growth (Cope and Hannah, 1975).

It is not surprising then that the graduate is viewed as "a credit, an alumnus or alumna, and a representative of the institution" while the non-graduate (dropout; stopout, non-completer, non-persister, failout) is seen as "eroding institutional capacity and credibility" (Cope and Hannah, 1975, p.6). Withey (1971, pp.130-131), after comparing the graduate with the non-graduate, concluded that graduates have better job opportunities, more job security, better working conditions, and higher job satisfaction. "Moreover," he stated, "they are more optimistic about their own outlook and the national economy. They belong to more organizations, assume leadership roles more frequently, and are better informed about national issues." "In short, it appears that graduating from a school of higher education is a 'bridge' to better personal status, institutional

progress and national well-being. The effectiveness of higher education can be improved if we learn more about why a large proportion of students withdraw...[how do they differ from graduates]...what happens to them, and what can be done" (Cope and Hannah, 1975, p.6).

There are several studies done on graduates and non-graduates which attempt to explore the questions posed by Cope and Hannah. As would be expected, many studies dealing with the graduates and non-graduate differ from each other in terms of design, population and terminology (Beaird, 1964; Fifield, 1965; Goetz and Leach, 1967; Pitcher and Blauschild, 1970; Astin, 1975; Bieschke, Erfer and Robinson, 1978).

Almost all of the studies that deal with the non-graduate are done either at the four-year college and university level (Shuman, 1956; Slocum, 1956, Iffert, 1957; Summerskill, 1962; Astin and Panos, 1967; Cope, 1970; Miller, 1970; Ashby, 1971; Gabbert, 1971; Astin, 1975; Bieschke, Erfer and Robinson, 1978), or at the junior-senior high level (Boggan 1955; Van Dyke and Hoyt, 1958; Williams, 1963; Duncan, 1956; Nelken and Gallo, 1978). There are very few studies done on community colleges (Koos, 1970; Medsker and Tillery, 1972; Monroe, 1972) with still fewer done on graduates and non-graduates. This scarcity may be partly due to the fact that "Junior colleges typically stress the fact their faculties can occupy themselves with teaching and counselling, for there is no research requirement imposed on faculty members" (Carnegie Commission on Higher Education, 1973, p.152).

If literature on community colleges (junior colleges) in the United States is scarce, it is even less in Canada. Claude Beauregard, Quebec Minister of Education, sums it appropriately when he said: "Alas,

we probably know more about American junior colleges than we know about community colleges in Canada" (cited in Campbell, 1971, p.xi). There has now been a modest start in studies dealing with Canadian community colleges (Campbell, 1971).

During the last ten years, the Research Branch of the Department of Labour and Manpower, Manitoba, has done a yearly, very extensive research on all three of the province's community colleges. Although the main emphasis of these researches appear to be related to labour market outcomes for graduates and non-graduates, there are excellent summaries of programs, courses, biographical and demographic data. There is also a table listing reasons and percentages for student withdrawal. Other researches related to Red River Community College are Prystupa (1969), Howard (1978), McLeod (1978) and Wieler (1979).

The researches by the Research Branch are strictly descriptive in nature and do include some of the variables that this present study focused on, such as demographic variables and reasons for student withdrawal. However, the above-mentioned researches by the Research Branch and the researches by Prystupa, McLeod, Howard and Wieler do not focus on the differences between graduates and non-graduates with respect to demographic variables, personal variables and student perceptions at the community college level.

If instructors and counsellors are to assist students in achieving their desired goals, then a knowledge of the characteristics of the graduate and non-graduate student will be most helpful in assisting the instructors and counsellors to do their jobs more effectively. Secondly, if there are distinct differences between the graduate and non-graduate,

then a profile of the non-graduate could be constructed. Several researchers (Astin, 1971; Blanchfield, 1971; Sainty, 1971; Boshier, 1972; Lloyd, 1978) have developed models which they claim can identify graduates and potential dropouts (non-graduates). If this is so, then institutions may be able to reduce the attrition rate by applying an appropriate model to identify the potential dropouts and then provide the necessary help.

PURPOSE OF THE STUDY

The main purpose of this study was to explore with the use of a questionnaire, some of the potential differences between graduates and non-graduates in a community college setting with respect to the following:

- 1) demographic variables (age, sex, marital status, financial situation, socioeconomic status of parents, academic background and place of residence).
- 2) personal variables (goal orientation, time management in terms of study, assignment and class attendance, part-time job, extra-curricular activities).
- 3) student perceptions (the college environment, instructors, counsellors, administrators, confidence and self respect).

RESEARCH QUESTIONS

This study attempted to answer the following questions:

A. DEMOGRAPHIC VARIABLES

Was there a significant difference between graduates and non-graduates at the community college level with respect to:

1. age, sex and marital status?
2. sources of funds and financial situation?
3. parental educational and occupational levels, educational level of an older brother/sister?
4. years out of school?
5. pre-community college academic background?
6. a student's location of residence (farm, village, city) during the majority of his pre-community

college schooling?

B. PERSONAL CHARACTERISTICS

Was there a significant difference between graduates and non-graduates at the community college level with respect to:

1. goal orientation, appropriateness of course and enrollment restrictions?
2. time management (time spent on study, assignment and class attendance)?
3. a part-time job?
4. participation in extracurricular activities?
5. living arrangement?

C. STUDENT PERCEPTION

Was there a significant difference in perception between graduates and non-graduates at the community college level with respect to:

1. reasons for attending Red River Community College?
2. parental encouragement?
3. appropriateness of size of college?
4. counsellors and counselling satisfaction?
5. instructor characteristics (knowledge and presentation of subject matter, model)?
6. informal student-instructor interaction?
7. college administration?
8. confidence level and self concept?
9. classroom management?

D. REASONS FOR WITHDRAWAL

1. What were the most frequent reasons given for withdrawal by non-graduates?
2. What were the future educational plans of non-graduates?

DEFINITIONS

1. R.R.C.C.

Abbreviated name for Red River Community College.

2. GRADUATE

A graduate is one who entered R.R.C.C. either in September 1979 or later and graduated with a certificate or diploma in June, 1981.

3. NON-GRADUATE

A non-graduate is one who entered R.R.C.C. either in September, 1979 or later and did not receive a certificate or diploma in June, 1981. A non-graduate may have withdrawn voluntarily, asked to withdraw by the college administration or attended but failed to meet the requirements for graduation.

4. TWO YEAR PROGRAM

A two year program is the equivalent to a 20 month program.

5. ONE YEAR PROGRAM

A one year program is the equivalent of a 10 month program.

6. CERTIFICATE COURSES

Courses requiring one year or less complete.

7. DIPLOMA COURSES

Courses requiring a minimum of two years (20 months) to complete.

8. JUNIOR COLLEGE

This term is mainly used to describe the two-year college in the United States. Monroe (1970) uses "community college" when referring to the junior college. Medsker and Tillery (1971) use the term "community-junior college". The junior college in the United States offers a curriculum which is largely confined to the first year or two year of studies leading to a baccalaureate degree which must be completed at another institution; either the four-year college or the university. Many junior colleges also offer technical and vocational courses.

9. COMMUNITY COLLEGE

The term "community college" is mostly used in reference to the two-year college in Canada. It differs from the American Junior College in that most community colleges do not prepare their students for transfer to the university although there may be special transfer arrangements made between a community college and a university or universities. For example, many community colleges in Alberta and British Columbia have this transfer arrangement with their universities. This is not so prevalent in Manitoba, Ontario and Quebec. (Campbell, 1970). Community Colleges in Manitoba generally offer courses in applied arts, business, industry

and technology.

10. OPEN DOOR POLICY

For general admission to RRCC, a student must have the necessary academic pre-requisites such as a Grade XII for courses requiring Grade XII, a Grade XI for courses requiring a Grade XI and so forth, or have reached the age of 20 on or before September 30 in the year of registration. (R.R.C.C. calendar-1981)

11. DEMOGRAPHIC VARIABLES

Demographic variables are those variables which involve, according to Good (1973), a study of the vital statistics of population. These variables include moral, intellectual, physical, physiological and economic factors.

LIMITATIONS OF STUDY

This study was limited by the problems which emerge whenever questionnaires are employed to obtain data, such as:

1. The number of completed responses to the questionnaire.
2. The willingness of the respondents to answer all questions truthfully.
3. The content and structure of the questionnaire.
4. The willingness of the respondents to honestly divulge personal information when asked.
5. Problems of locating the graduates and non-graduates and
6. The researcher's interpretation of the collected data.

DELIMITATIONS OF THE STUDY

1. This study was confined to Red River Community College in Winnipeg, Manitoba, Canada.
2. The sample was confined to all those students who graduated in June, 1981 and all those who should have graduated in June, 1981.
3. These students would include:
 - a) those who registered in September 1979 for a two year program (20 months)
 - b) those who registered in September 1980 for a one year program (10 months)
 - c) those who registered in September 1980 or later for a program requiring less than 10 months
4. This study did not include evening students nor Adult Basic Education students at Red River Community College.

CHAPTER II

REVIEW OF THE LITERATURE

Research in post-secondary non-graduating students is a continuing concern in the field of higher education. Studies of non-graduating (dropout, stopout, fallout) students at the senior college and university level are abundant while studies of such students at the two-year colleges (junior/community) appear very infrequently. There is a paucity of information on the junior college student. Some of the few educators who have written extensively about the junior/community college in the United States are Medsker (1960, 1971), Cross (1968), Koos (1970), Tillery (1971), O'Banion and Thurstone (1972). One of our biggest contributors in Canada is Campbell (1970).

The review of the literature will be divided into 3 parts. Part I will discuss the factors that contribute to college attendance and the characteristics of the junior/community college student. Part II will be devoted to attrition rates and the reasons given for withdrawal at two-year colleges. Part III will be devoted to comparing the differences between the characteristics of graduates and non-graduates mainly at the four-year college and university level on selected demographic variables, personal characteristics and student perceptions since there is a scarcity of this type of information on the junior (community) college student. Whatever relevant studies exist in the above-mentioned areas will be cited.

PART I

FACTORS CONTRIBUTING TO COLLEGE ATTENDANCE

There are several factors which will determine the probability that a given boy or girl will attend a post-secondary institution. These, according to Havighurst and Rodgers (1952), are: mental ability; social expectation; individual motivation; financial ability; and propinquity to an educational institution. Medsker (1960) did a survey of over three thousand students in four-year colleges and found that two-thirds of these students listed either (1) persuasion by parents, counselor and friends, (2) location of college (proximity), or (3) lower cost as their primary reason for attending a four-year college. He also stated that those same reasons have been reported in numerous unpublished studies (p. 47). He also found that the percentage of students who choose the two-year college, particularly the public junior college because of its program or its prestige, is small in comparison to those who choose it because of parental influence or expediency.

Havighurst and Rodgers (1952, p.137) found from another study that there are three groups of people who have the motivation to continue to post-secondary institutions. These are the high-status static, the climber and the strainer. The high-status static is a person of upper or upper middle-class, who attends college because it is normal for his group. The climber is a lower-middle class youth who has a solid and realistic ambition to "get ahead" in life, and the strainer is a lower-middle class youth whose goals in life are mixed. He wants to "make good" although he is not sure what this means. Havighurst and Rodgers (1952, p.142) and Monroe (1970) found that individual motivation is a

stronger determining factor than social expectation or financial ability. The belief is that if a youth has a strong desire, he will overcome social and financial barriers to get into college and to persist.

If instructors and counselors are to be helpful to the community college student, then a knowledge of the student's personal characteristics will better equip them to do their job more effectively.

PERSONAL CHARACTERISTICS OF JUNIOR COLLEGE STUDENTS

Several researchers have presented a number of tentative assumptions about the personal characteristics of the junior college student (Medsker, 1964; Medsker and Trent, 1965; Astin, Panos and Creager, 1967; Cross, 1968; Koos, 1979; Monroe, 1972; O'Banion and Thurston, 1972; Astin, 1975). Bugelski et al. (1940) after studying several junior colleges, wrote: "We must conclude that intellectual dimensions sharply differentiate junior college students, as a group, from senior college students. The junior college student is less able - on our present tests; he is less intellectually oriented - on our present measures, and he is less motivated to seek higher education - in our traditional colleges" (p.319).

Cross (1968), in describing junior college students, states: "They have lower educational and occupational aspirations than their peers who begin their education in four-year colleges...they are less attracted to reflective thought...they are not committed to intellectual values, they do not seek an intellectual atmosphere, nor do they find it" (p.34). Monroe (1972) states that community - college students as a group "are almost as heterogenous as the community in which the college is located

...they are from the homes of neither the very rich nor the very poor" (p.184).

AGE, SEX AND MARITAL STATUS

The average community college student is usually older than the four-year college student (O'Banion and Thurston, 1972) at the time of entrance into college. The ratio of males to females in the community college is usually higher than that of four year colleges (Medsker, 1960). Also, the ratio of married students to non-married students is higher in the community college than at the four-year colleges (Medsker and Tillery, 1971).

The typical community-college student body has a median age of about nineteen years (Monroe, 1972). Age ranges from sixteen to over thirty for the full-time day students. Koos (1970) reports that almost seven-eighths of the students are below twenty-two. He found that 5 percent of the students were between 18 - 19 years while 12 percent were between 20 - 22 years. In a national study of junior colleges, Medsker (1960) found that 31 percent of the students were between 18 - 19 years of age while 10 percent were between 20 - 22 years. O'Banion and Thurston (1972) found that only 15 percent of entering four-year college students are over 19 years old while over 30 percent of junior college freshmen are older than 19 years.

In general, male students outnumber female students in the community colleges. Medsker (1960, p.45) reports that in 1952, a three to one ratio, in favor of the male student, characterized the public community college. In a 1968 Illinois study (Illinois Board of Higher Education), 62 percent of the community-college students were male. A Sauk Valley

Community College (Illinois survey for 1967-1968) reported that 58 percent of the students were male, a lower ratio than most colleges report. This higher ratio of men to women, without question, reflects social values; education is highly valued for men and not so highly valued for women (Monroe, 1972). With respect to marital status, Medsker and Tillery (1971) report that the ratio of married students to non-married students is higher at the community college than at the four-year college. Astin (1967) did a survey of entering freshmen in senior colleges and found that 2.4 percent of the total sample were married at the time of college entry.

FAMILY BACKGROUND

The family background of a student is a very significant factor in determining what type of college he will attend and what his chances would be of completing his program of studies. Community college students generally come from families with less favourable backgrounds than students of four-year colleges. Although they represent a cross-section of the community's population, community college students are mainly drawn from the less affluent families especially from the lower-middle class and the lower class (Clark, 1960; Monroe, 1970). Havighurst and Neugarten (1957) estimated that not more than 5 percent of the students of a large metropolitan community college came from the upper classes and that these were students who were not academically able or motivated to attend a four-year college or university. Mellinger (1962, p.169), in his study of community-college students in Chicago, reported that students from the lower and lower-middle classes accounted for 96 percent of the freshmen population. Medsker and Trent (1965, p.73), found in their

study of ten thousand high school graduates that only 20 percent of those who went to the community colleges had professional and managerial fathers as compared with 35 percent of the students who went to the public universities.

A study of the family incomes of Illinois community-college (Bourland, 1969, p.17), in which a student's family earning less than five thousand was considered living at the poverty level, found that 75 percent had incomes between five and ten thousand dollars per year, 12 percent had less than three thousand dollars, and 12 percent had over fifteen thousand dollars.

ABILITY LEVELS AND EDUCATIONAL ASPIRATIONS

It seems that ability levels (Astin, 1975) and educational aspirations (Monroe, 1972) are positively related to college success and graduation. Community college students, although they come from all levels of academic ability, as a group are reported upon consistently in the studies on students characteristics as inferior to four-year students in those abilities which are measured by standardized aptitude tests (Medsker, 1960; Monroe, 1970; Astin, 1975). The average community-college student ranks at about the thirteenth percentile on scales designed for four-year students (American College Testing Program, 1969, p.117).

Medsker (1960, p.31) reports a California study for 1952-1953 which showed that community-college students scored from ten to fourteen points lower than four-year students on IQ tests. The ranks of students in the high school classes also reflect the fact that community colleges attract the weaker students. In Illinois community colleges in 1968, 39 percent of the freshmen came from the top half of their graduating classes, 35 percent from the lowest quarter. These scores indicate that over 60 percent

of the students are from the lower half of the high school seniors (Bourland, 1969, p.3). Cooley and Becker (1966, p.464), concluded that in general, community-college students were more like the non-college youth than four-year students, while Hardin (1936, p.18) found that they were more like high school seniors than juniors and seniors in four-year colleges. The fact that the community colleges tend to attract many students with lower academic ability may be due in part to the nature and purpose of the community college itself. Richards and Braskamp (1969, p.80) state: "Two year colleges attract pragmatic students seeking vocational training; are less attractive to talented students who are intellectually and academically oriented."

"Generally speaker, junior college students have lower educational and occupational aspirations than their peers who begin their education in four-year colleges" (Cross, 1968, p.34). Between 70 and 75 percent of junior college students indicate on entry into college that they intend to transfer to a senior college and a bachelor's degree or more. Many researchers (Cross, 1968, Medsker and Tillery, 1971; Astin, 1975) agree that junior college students set their educational aspirations unrealistically high. As a result, "it is not surprising that only 35 percent of fewer of these students actually transfer" (American College Testing Program, 1966).

VALUES, SELF CONCEPT AND PERSONALITY

"As a group, junior college students are not committed to intellectual values; they do not seek an intellectual atmosphere, nor do they find it" (Cross, 1968, p.34). Medsker (1964) wrote that a large number of junior college students do not possess well-defined attitudes toward the purpose of education, and are in college because of cultural expectations or because they cannot find employment. Clark and Trow (1966) have found for types of students sub-cultures on college campuses: the "collegiate" culture, the

"academic" culture and the "non-conformist" culture. The culture most present in the junior college is the vocational (p.23). "In these urban colleges", writes Bossen (1968, p.27), "there is not enough time or money to support the college culture. These students commute daily to the college, and many finance their education through part-time work." For these students, wrote Clark and Trow (1966... "college is largely off-the-job training, an organization of courses and credits leading to a diploma and and a better job than they would otherwise command" (p.21).

Data from Astin and his associates (1967), and from Cross (1968), show that junior college students are less confident than four-year college and university freshmen on academic, leadership, mathematical, and writing ability traits as well as on drive to achieve and intellectual self-confidence. They are less likely to venture into new and untried fields; they seek more certain path ways to the occupational success and financial security which they value so highly. They are, according to Cross (1968, p.34) "less autonomous and more authoritarian."

Monroe (1970, p.199) states that junior college students are often quite uncertain of their interests and doubt if they have the motivation to sustain them through a full college program. Many do not feel confident that their high school work prepared them adequately for college. They are more critical of their high school courses and teachers than are those who go directly to four-year colleges. Collins (cited in O'Banion and Thurston, 1971, p.19) states that the junior college student begins with doubts, sinks to depression, and then stops trying in areas

where he experiences little, if any, success.

PEER GROUP INFLUENCES AND SENSE OF COMMUNITY

Most junior college students continue to associate with their high school friends (Bossen, 1968; Astin, 1975). Not only does this peer group influence their attitudes toward the college, they also tend to reinforce their feeling that college is no different from high school.

It is not surprising then that Collins (1971) would write: "The community college student does not have much sense of community, on campus or off. There does not seem to be much of 'we' feeling among most junior college students, and there is, therefore, only joint loyalty to the college and even a more pallid identification with the wider community" (p.23). This apparent lack of sense of community may be due in part to the fact that many courses may be two years or less in duration, students commute since very few community colleges have residences, and thirdly, students still associate very often with their former school mates.

It appears from the cited studies that all researchers agree that the community college student is inferior academically, comes from a less favourable socio-economic background, has a lower self-concept and is less confident than most four-year college students.

PART II

Now that the characteristics of the junior (community) college student have been discussed, it seems appropriate to discuss attrition rates particularly attrition rates of the junior colleges. Since the literature on attrition rates at the junior college is very sparse, there is some discussion of attrition rates at the four-year college and university. A section is also devoted to reasons for withdrawal from the junior colleges.

ATTRITION RATES

Attrition rates vary from institution to institution (Monroe, 1970; Tillery, 1971; Astin, 1975) and from country to country (Iffert, 1958; Harvie and Fair, 1969; Miller, 1970; Asby, 1971; Boshier, 1972). Astin (1975, p.110) in a study of 358 institutions - 76 universities, 219 four-year colleges and 63 two-year colleges found that the actual dropout rates range from a low of 3 percent to a high of 81 percent. The institution with the lowest dropout rate (3 percent) is a highly selective, private-nonsectarian liberal arts college for women located in Northeastern U.S.A. The institutions with the highest dropout rates are both two year colleges; one a private college located in the South, and the other a large public college located in the West.

ATTRITION RATES FOR FOUR-YEAR COLLEGES AND UNIVERSITIES

Long and Perry (1953) studied 25 diversified colleges and reported that from 27 to 63 percent of their entering freshmen did not graduate from any college four years later. Iffert (1958) reported a United States national average dropout rate of 60 percent for all colleges and universities. Of this number, they concluded that about 20 percent would receive a degree at a later date. Summerskill (1962), in a survey covering the rates of attrition from 1913 to 1965, found that the rates

varied from 12 to 82 percent, with a median loss of 50 percent. Goetz and Leach (1967) in a study of attrition at the University of New Mexico, found that two out of every three (67 percent) entering freshmen did not graduate in four years. These figures, they say, "compare with national estimates" (p.883). A study of attrition at the University of North Carolina (Office of Institutional Research, 1977) reported a 22 percent attrition rate for the 1975 freshmen.

Baumgart and Johnson (1977) report an attrition rate of 40 percent for undergraduate students at Macquarie University in Australia. They maintain that this rate has remained fairly constant for each intake of new students. Asby (1971) noted that in Britain, only 13.3 percent of those admitted to university dropped out before attaining their first degree. Miller (1970) reported that a study of 43 universities in the United Kingdom showed the percentage of students failing to get a degree ranged from 1.5 to 40.5 percent with an average of 13 percent after four years. Anisef, Paasche and Turritin (1980), in a six year follow-up study of high school students in Ontario, found that 21 percent of the students who had enrolled in universities had withdrawn at sometime while this figure increased to 25.3 percent for students who had enrolled in community colleges. For students who enrolled at sometime in both universities and community colleges, the withdrawal rate was 49.6 percent.

Recent figures released by the University of Manitoba (Office of Institutional Analysis, November 1981) showed that 4,156 full time first year students were enrolled as of September 5, 1980. This number was reduced to 3,358 as of April 1, 1981, thereby giving an attrition rate

19 percent for full time first year students. Although there was a decrease in the enrollment for full time students, part time students increased from 1,250 (September 5, 1980) to 2,195 (April 1, 1981).

One should use attrition figures with a great amount of caution because attrition studies are not strictly comparable (Harvie and Fair, 1969). Attrition studies are done for varying reasons and greatly differing institutions and student populations are studied. Also, the definition of attrition and the design may differ from one study to the next (Astin, 1975).

ATTRITION RATES FOR TWO YEAR COLLEGES

Because of the nature of the community college and the academic background of the students, it is not surprising to find that community colleges suffer with the highest dropout rate among all segments of higher education (Yess, 1979). Astin (1975) also found that the public two-year (community) colleges consistently show the highest dropout rates (mean of approximately 59 percent). "Rates are somewhat higher - about 65 percent at two-year colleges located in the West and Southwest" (p.111). Medsker and Tillery (1972, p.49), in a study of attrition in several community colleges, concluded that second-year enrollment tends to be less than half of first-year enrollment, thus suggesting more than a 50 percent attrition rate. They found from the 22,000 new students who entered several community colleges in 1961, more than 54 percent withdrew with less than 60 units, and about two-thirds completed no more than one year.

Astin (1975, p.113) studied 42 public two-year colleges in the United States and found the dropout rate for men was 56 percent while that for women was 59 percent. A similar study of 46 public four-year colleges showed that the dropout rate for men was 31 percent while that for women was 25 percent. Private Universities (N = 30) had the lowest dropout rate with 20 percent for men and 21 percent for women. A study by McMillan (1977) of the freshmen who enrolled at Essex Community College in the Fall Semester of 1976, but who did not register in the Winter Semester of 1977, showed a 33.6 percent attrition rate. Anderson (1976) found an attrition rate of 21 percent for freshmen enrolling at Alleghany Community College in 1975.

A survey of the Manitoba Community Colleges, done by the Research Branch of the Department of Labour and Manpower (August 1980) read in part: "A mail survey technique was employed to collect information on all 1978 graduates and non-graduates of Manitoba community college. . . A total of 5,728 former community college graduates and non-graduates were surveyed. . . For the graduate survey, a total of 3,095 surveys were sent. . . For the non-graduate survey, 2,183 surveys were sent. . . This means that, on the average, the colleges suffered on attrition rate of 41.7 percent for that period.

The researcher found from six of the apprenticeship classes that he taught at R.R.C.C., (September 1981 - February 1982) that the attrition rate varied from a low of 13 percent to a high of 38 percent. The average rate was 28 percent.¹

¹Figures available upon request from the Technology Division of R.R.C.C.

Many researchers have attempted to explain that the very nature and philosophy of the community college combined with the quality of the students and instructors have contributed to the large dropout rates. Roueche and Kirk (1973) believe that the "open door policy" of the community college, although, alluring and even unique, may be diluting its potential by promising to be all things to all people. Deval (1968) says simply that in attempting to perform too many functions, the community college has become to "bugaboo in American Education" (p.170). Lynes (1961) was even more severe in his condemnation of the community college. He states: "its functions are so diverse, its pupils so scattered...it escapes identification...it has been avoided as a place to teach by most scholars" (p.59-60).

Proponents of the community college and its commitment to providing educational opportunity to all also state their convictions in strong terms. These writers (Fields, 1962; Jennings, 1970) staunchly proclaim the community college to be "democracy's college" and the "peoples college". Jennings (1970, p.17) charges that they deliberately encourage folk knowledge and that there is something for everybody in the two-year college. Fields described the community college as possessing the following five characteristics: democracy, comprehensiveness, community-centeredness, life-long education, and adaptability (p.64-65).

Regardless of what the critics say, both supporters and non-supporters, the community college is here to stay and will continue to expand as has been evidenced by the continuous growth over the last two decades. For example, Monroe (1970) states that in 1961, the Junior College Directory (U.S.) reported a total of 678 junior (community) colleges. By 1970,

the number of two year colleges had grown to over 1,000 (p.13). Medsker and Tillery (1971) stated that the staff of the Carnegie Commission on Higher Education recommended that by 1980, there would be a need for an additional 230 to 280 new community colleges in the United States which will cost millions of dollars (p.13). In Canada, the growth has not been in the same proportion but has increased steadily from 40 junior colleges in 1958-59 to 119 in 1970 (Campbell 1970, p.5-8). What educators and educational planners ought to do, are to seek ways to make the community college more productive in terms of availability and variety of courses, counselling facilities, instruction and a reduction in the number of non-graduates. It seems logical then that a greater number of researches should be directed towards the community college both in the United States and in Canada.

REASONS FOR WITHDRAWAL

The reasons for withdrawal from both the four-year college and the community college appear to be inconsistent at best. Many students tend to give "socially acceptable answers" rather than the real reason or reasons (Goetz and Leach, 1967; Astin, 1972; 1975; Hannah and Cope, 1975).

In a study by Demos (1968), students who were about to withdraw from college were asked to complete an exit questionnaire, and then to visit a counselor for a short interview. In the interview session, the counselor attempted to identify the "real" reason for the student's withdrawal. Demos found that 39 percent of the male withdrawals and 21 percent of the female withdrawals said they were withdrawing because of financial reasons. The counselors who interviewed these students felt that only 24 percent of the male and 13 percent of the females should

have stated financial reasons as their primary reason. This, plus other discrepancies, led Demos to conclude that the reasons given by the withdrawing students are not, many times, the true reasons as seen by counselors. A similar study conducted previously by Amori (1941) found similar discrepancies. Monroe (1970) believes that lack of motivation must be the most predominant single factor. "The failure to work hard, to persist, to carry on no matter what the academic obstacles, is a most important cause of dropout in colleges" (p.210).

Three of the largest national studies (U.S.A.) on reasons for dropping out of senior colleges and universities were done by Iffert (1957), Panos and Astin (1967), and Astin (1975). One very extensive study on reasons for dropping out of two-year colleges was done by Medsker (1960).

The three studies (Iffert, Panos and Astin, Astin) found differences in the reasons for dropping out between the sexes. These studies indicate that the major reason given for women's dropping out was marriage, whereas men tended to drop out more from dissatisfaction with college (Panos and Astin, 1967) and from lack of motivation or interest (Iffert, 1957; Panos and Astin, 1967, Astin, 1975). Finances were cited as an equally important matter for both sexes. Men more consistently than women attributed their dropping out to low grades. Frequently cited by both men and women in the more recent study was dissatisfaction with the college environment, lack of interest in studies, uncertain career plans, and uncertain major. These studies and others (Lins and Abell, 1966; Suczek and Alfert, 1966; Bayer, 1968; Mehra, 1973) illustrate that women consistently give different reasons for withdrawal, men tending to cite internal and academic reasons while women more frequently mentioned external and nonacademic ones.

REASONS FOR WITHDRAWAL FROM THE JUNIOR (COMMUNITY) COLLEGE

The literature on reasons for withdrawal from the community college is very sparse. Medsker (1960, p.48) did a national survey which included 20 two-year colleges between 1949 and 1957 and categorized the reasons that students gave for withdrawal. His results are shown in the table below.

TABLE I

Reasons stated for withdrawing from Junior College
Reported by approximately ten thousand students enrolled in 20 two-
year colleges between 1949 and 1957

Reasons stated for withdrawal	No. of students	Percent
1. Full-time employment	2,734	28
2. Personal and Health	1,558	16
3. Moved or transferred	1,084	11
4. Non attendance	1,013	10
5. Academic or faculty action	860	9
6. To enter armed forces	832	8
7. Not interested in schools or dissatisfied	763	8
8. Financial	549	6
9. Marriage	264	3
10. Educational goals completed	55	1
TOTAL	9,898	100

Several less significant studies were done on particular colleges such as Stine's (1976). He examined the reasons for withdrawal from 1,474 students who had attended Los Angeles City College during the spring semester of 1973, 1974 and 1975 but later withdrew during the semester. His results are shown in table 2 below.

TABLE 2
Reasons for withdrawal by rank 1975

Reasons	Rank	Reasons	Rank
Going to work full time	1	Not enough time to study	7
Personal problem	2	Family illness	8
Conflicting hours with job	3	Transportation problem	9
Insufficient funds	4	Unhappy with schedule	10
Personal illness	5	Family moving away	11
Going to another school	6	Poor grades	12

A major study in Manitoba was undertaken by the Research Branch, Manitoba Department of Labour and Manpower (February, 1980). They found that students gave the following reasons for not graduating: Lost interest (18.1%), personal or financial (15.5%), course too difficult (15.5%), other (12.9%), failure (11.9%), bad or unfair instructors (6.7%), got a job (6%), illness (6%), dropped a course (2.8%).

An analysis of these three studies seem to indicate that although most of the reasons given are inconsistent in terms of rank, they are nevertheless present in almost two of the three studies. For example, while full time employment (financial) and personal problems rank very

very high on all three studies, family moved or transferred as a reason, ranked high on Medsker's study, low on Stine's study and was not mentioned in the Manitoba study.

The phenomenon of attrition seems related to several demographic variables, personal characteristics and perceptions of the non-graduates. It seems logical therefore, to examine in some depth these variables in the next section.

PART III

This section examines the most pertinent studies relating to differences between graduates and non-graduates on selected demographic variables, personal characteristics and student perceptions. Very little information exists on the above-mentioned variables concerning the graduate/non-graduate community college student (Medsker, 1960p Trent and Medsker, 1968; Koos, 1970; Monroe, 1972). Consequently, some of the relevant studies mainly at the four-year college level have been cited in order to obtain an understanding of the nature of the graduate and the non-graduate.

DEMOGRAPHIC VARIABLES

The present study will attempt to add to the meagre literature that exists on the differences between the community college graduate and non-graduate with respect to the above-mentioned variables. An analysis of the various demographic variables as cited in the four-year college studies will reveal that there are differences between the graduate and non-graduate. Some of the demographic variables which have been considered in the review of the literature are age, sex, marital status, financial aid, educational level and socio-economic status of the parents, home environment, academic background, size of home town and location of residence.

AGE, SEX AND MARITAL STATUS

It appears from several studies that older students tend to withdraw more often than younger students. Although some studies state that men tend to withdraw more often than women, there appears to be conflicting results. There is very little information on the dimension of marital status between graduates and non-graduates at the community college level. Two studies (Wise, 1958; Medsker, 1960) indicate that about 22-23% of community college students are married but no mention is made as to the percentage of married students who graduate or do not graduate. Astin (1975, p.65) though mentions that being married at the time of college entry increases women's chances of dropping out by 11 percent, but it decreases men's chances by about 8 percent.

With respect to age, Astin (1975) states that older students, particularly older women, are more likely to dropout than students of traditional entry age (17-19). "This finding", he concludes, "is consistent with research by Newman (1965) who reported a positive association between age and dropping out, and by Trent and Medsker (1967) who reported that late entrants are more likely to leave college before finishing" (p.44). Anderson (1976) found, from a study of attrition rates at Alleghany Community College, that the age group that contained the largest number of students (16-19) had the lowest attrition rate while the age group that contained the smallest number of students (26-30) experienced the highest attrition rate.

While there may be few studies regarding the average age of graduates and non-graduates, there are several studies relating to the sex of

graduates and non-graduates. Many studies found that males tend to have a higher dropout rate (Bemis, 1962; Panos, 1964; Hannah and Cope, 1975) while few studies have found the attrition rate higher for women (Holmes, 1959; Astin, 1964; Bieschke, Erfer and Robinson, 1980). There are still other studies such as Summerskill (1962) who found that there was no difference in the number of males and females dropouts. Iffert (1957), in a national study, found that men had a higher attrition rate (61 percent) than women (59 percent). He regarded this difference as not being significant. Knoell (1960), in her studies of California State colleges, reported that more men were expelled for academic reasons than were women; but the higher voluntary withdrawal rate of women over the four years tended to equalize the attrition rates.

In summary then, studies seem to indicate that at the four-year college, older students and men tend to drop out more often than younger students and women, and no studies focused on marital status. This current study done in a community college setting attempted to explore whether differences exist between graduates and non-graduates with respect to age, sex, and marital status.

SOURCE OF FUNDS AND COLLEGE PERSISTENCE

Students who attend colleges and universities need money to complete their education which is a very expensive proposition. Many students rely on parental support, scholarships, grants, and part-time jobs to supplement their college finances. It would appear from Astin's study (1972) that these several sources of financial support have different effects on students' functioning, performance and terminal status.

Astin (1975, pp.51-56) who did a very extensive study on the impact of financial aid on college students found the following:

1. Students who received support from parents for college expenses generally enhanced their ability to complete college. This facilitative effect occurs among students in all income groups, except women who come from high-income brackets. For them, receiving parental support appears to contribute negatively to college persistence.
2. Students, who are married when they enter college, persist better if their spouses provide major support for their college costs. If the spouse is able to provide minor help, the effect is reversed, and the student is better off having no support. Among students, who marry after entering college, assistance from the spouse facilitates persistence, regardless of the amount.
3. Scholarships or grants are associated with small increases in student persistence rates. The beneficial effects are confined largely to women from low income families. The amount of the grant support appears to be a major factor in student persistence, particularly among black students. Astin (1975, p.56) found that students who received scholarships increased their probability of persisting in college by 3 percent.
4. Reliance on loans is associated with decreased persistence among men in all income groups. Among women, the effects are highly variable, depending on amount of loan support and the income level of the woman's parents. Reliance on loans is associated with increased persistence among black students attending white colleges.
5. Participation in work-study (campus) programs seems to enhance student persistence, particularly among women and blacks. Work-study has

its most consistent positive impact among students from middle income families. Participation in work-study programs during the freshmen year reduces a student's chances of dropping out by 8 percent for men and 11 percent for women.

6. Reliance on savings or other assets appears to decrease the students' chances of finishing college. This effect was observed among men and women, and among blacks attending white colleges.

7. In general, any form of aid appears to be most effective if it is not combined with other forms. This is particularly true in the case of work-study programs, which tend to lose their beneficial impact when combined with grants or loans. This loss of impact is especially marked among low-income students. Similarly, grants are most effective if the student has no loan. The only combination which is associated with persistence is work-study and major support.

According to the major study done on four-year college students, different sources of funds seem to have varying effects on student status in terms of graduating or non-graduating. Support from parents, spouse, scholarships, grants, and work-study tend to increase students chances of graduating. Heavy reliance on loans and savings appears to reduce students chances of graduating. This study attempted to investigate whether there is a difference between the graduate and non-graduate with respect to source of funds.

Whether a student becomes a graduate or non graduate is influenced to a certain extent by the educational and occupational income levels of parents and the general atmosphere of the home environment. Studies will generally show that students who come from homes in which parents are

educated beyond high school level and whose income levels are fairly high in comparison to the average worker, will have a better chance of graduating from college than the students from homes in which the parents are less educated and belong to lower income bracket.

LEVEL OF PARENTAL EDUCATION

Most studies (Van Dyke and Hoyt, 1958; William, 1963; Duncan, 1965; Goetz and Leach, 1967; Trent and Medsker, 1967; Astin and Panos, 1969; Cohen, Branter and Connor, 1969; Chase, 1970; Astin 1972) have found that parents of dropouts tend to have less education than parents of persisters. An exception was Boggan (1955) who concluded that the education of parents does not significantly differentiate dropouts from graduates.

Goetz and Leach (1967) found that the education of the father did not significantly differentiate continuers from withdrawees while that of the mother did. Van Dyke and Hoyt (1958) analyzed the relationships between dropping out and education of mother, father, and both parents, and in all cases found that the lower the educational attainment of parent(s), the greater the tendency for a student to drop out.

Williams (1963) reported a survey in Maryland which found that 79 percent of the mothers and 80 percent of the fathers of dropouts had themselves not graduated from high school; 63 percent of the mothers of dropouts had less than 10 years of education; 31 percent of the fathers and 24 percent of the mothers of dropouts had a sixth-grade education or less. The Oklahoma State Regents for Higher Education (1964) found that freshmen whose parents were both college graduates persisted through the freshman year at a 13 percent higher rate than those from families in which neither parent had a baccalaureate degree. At the University of Michigan,

Gurin, Newcombe, and Cope (1968) also found the educational level of the parents to be related to persistence in college: the lower the educational level, the greater the chance of dropping out. Warriner, Foster, and Trites (1966), studying the entering freshman class in 1962 at the University of Oklahoma, also found that student attrition was related to whether their fathers and mothers had completed high school or college.

Multi-institutional studies by Astin (1970), and Jaffee and Adams (1970), using several indices of social class, confirmed that children of families of higher social-class standing are more likely to persist to graduation. The father's educational level was the best measure for distinguishing between persisters and dropouts.

It seems logical to conclude that there is overwhelming evidence that parents of dropouts usually have less education than the parents of graduates. With the exception of the study by Trent and Medsker (1967) who studied the educational level of parents of students in the two-year college, all other cited studies either relate to the senior-high or the four-year college. There appears to be a great need for more research at the two-year (community) college level with respect to this variable.

This present study attempted to investigate whether there is a significant difference between the graduate and non-graduate at the community college level with respect to educational level of parents.

OCCUPATION OF PARENTS

The occupation of parents of non-graduates (dropouts, stopouts, non-persisters) has frequently been studied singly as a factor associated with

dropping out. Several such studies (Young, 1954; Van Dyke and Hoyt, 1958; Williams, 1963; Beinstock 1964; Astin, 1975) have consistently shown that the principal wage earner in the non-graduate's family ranked lower on the occupation scale than that of the graduate's family. Van Dyke and Hoyt (1958) concluded that the chances were 9 to 1 that the child of an unskilled laborer would drop out as compared with the child of a professional man. Duncan (1965) reported that by age 16 the enrolled son of a white-collar worker had completed an average of a half grade schooling more than the enrolled son of a non-farm laborer or farm worker.

In contrast, Das (1963) reported that potential dropouts of either sex could not be differentiated from potential persisters in terms of father's occupation. Boggan (1955) also found employment of parents not significant. Walsh (1966) reported that 18 percent of parents of dropouts were unemployed, compared with 3 percent of parents of graduates. Studies on the number of families of dropouts on welfare report figures from 3.7 percent of 33.3 percent (Howard, 1972).

It appears that there is sufficient evidence at the junior-senior high school and four-year college levels to support that occupation of parents do differentiate between graduates and non-graduates. However, there are very few studies that deal with the community college in this respect. Medsker and Trent (1967) and Mellinger (1962) have supported the view that parents of the community college students come from the low income families. Nevertheless, no mention is made of the differences in types of jobs that are held by parents of graduates and non-graduates. This present study investigated whether there are differences between

graduates and non-graduates with respect to the type of jobs held by parents.

ACADEMIC BACKGROUND

Several studies (Summerskill, 1967; Williams, 1967; Bayer, 1968; Astin and Panos, 1969; Blanchfield, 1971; Astin, 1978; Creamer, 1980) indicate that a student's high school average is the best single predictor of a student's persistence in college and university. The measures used in most of those studies consisted of the student's high school average, rank in high school graduating class, and academic ability as measured by college admission tests. These studies suggest that students with high averages from high school tend to stay longer in college and to do better than students with averages on the lower end of the scale.

Astin (1972) did a national study which included the student's academic background before entering the four-year college. He consistently found that students with high school averages of A⁺, A, B⁺ and B persisted longer, and also did better than students with lower averages in the four-year colleges. He also found that practically every student who had a C- average in high school dropped out from college.

Astin (1972, p.98) states:

It should be added that even among students with A average and or A⁺ averages, nearly one in five drops out. High grades are therefore not the only condition for remaining in college. Not all studies have shown that high school grades, rank in high school and college admission tests are good indicators of a student's persistence in college. Some studies have shown that these measures show a negative relationship with respect to dropping out of college in such diverse settings as junior colleges (MacMillan, 1970; DeVecchio, 1972; Eagle, 1972) public universities (Chase, 1970; Cope, 1970) and private colleges (Hannah, 1971), high ability students (Hill, 1966), blacks (Barker and Caple, 1970; Mach, 1973).

Roueche (1967) concludes from a review of several studies on community college dropouts that academic-ability scores appears to be of no value in predicting dropouts. Nevertheless, the evidence in support of high school grades as a predictor of persistence or non-persistence far exceeds those that do not seem to support the statement.

Students coming from high school to the community college should not expect better grades than their high school ones. Astin (1972, p.99) found from his study of persisters, dropouts and stopouts that about one student in three (33%) obtained the same grade in college as they did in high school, only one in five (20%) obtained higher grades and nearly half (47%) obtained lower grades.

It seems from the studies cited that graduates tend to have better grades in high school than non-graduates, and that students entering colleges will not drastically alter their high school averages. This study attempted to investigate whether there are differences in the high school grade average between graduates and non-graduates at the community college level.

SIZE OF HOME TOWN

Apart from a student's past academic background, it appears that the size of his home town and his place of residence during college attendance have some influence on whether the student will become a graduate or non-graduate. Several studies (Summerskill, 1962; Gurin, Newcomb, and Cope, 1968; Astin, 1975) found that withdrawals more frequently occur among students coming from rural, small town backgrounds, and from the smaller high schools. Astin (1975) believes that the probable reason for this is the fact that students who were raised on farms or in small

towns may be less well prepared to deal with the interpersonal stresses and bureaucratic procedures of large, complex institutions than students who have grown up in large cities.

This present study investigated whether there are differences between graduates and non-graduates in terms of the size of their hometown and location.

PERSONAL CHARACTERISTICS

An analysis of the personal characteristics indicates that there are differences between the graduate and non-graduate at the four-year college level. Some of the personal variables that are considered in the review of the literature are goal orientation, time organization as it pertains to class attendance and out of class preparation, part-time work, participation in extra-curricular activities and living arrangements while attending the community college.

GOAL ORIENTATION AND ATTRITION

Several studies indicate that students with specific vocational goals have a better chance of success than those who do not (Iffert, 1958; Sandford, 1967; Elton and Rose, 1971; Monroe, 1972). Hannah and Cope (1975, p.19) stated that personal commitment to either an academic or occupational goal is the single most important determinant of persistence in college. Diggs (1979, p.99) feels that students will stay in school if they have a plan, know where they are going, and feel they are progressing toward the realization of their objective.

Elton and Rose (1971) have reported a major difference in the persistence rate of a small sample (N = 137) of vocationally decided and

undecided freshmen. They found that only 17 percent of the undecided freshmen persisted to graduation - even though the specific commitment may have undergone one or more changes. Abel (1966) reported that the persistence rate to graduation of failing students (less than C average) was twice as high if they were certain of their goals. Not all studies have shown that students with specific goals have a better chance of success. One study by Goetz and Leach (1967) showed that 51 percent of the continuers responded negatively compared to 34 percent of the drop-outs when asked to respond to the statement, "On enrollment in the university, I had a definite plan of courses in mind which were related to career or vocational goals." "These results", he stated, "seem to indicate that having a definite goal is not only not productive of continuance, but that not having a goal may be predicative of continuing" (p.885). Nevertheless, this seems to be an isolated case.

Evidence from all the studies cited, except the one by Goetz and Leach, seem to indicate that students at the four-year college who have specific goals have a better chance of graduating than those who do not. This present study attempted to investigate whether there is a significant difference between graduates and non-graduates with respect to having a definite goal while attending the community college.

ATTENDANCE AT CLASSES

Frequent absences seem to characterize school dropouts both at the high school and post high school level. Snepp (1956) reported that 80 percent of the dropouts in his study had chronic attendance problems. Wilson found that 74 percent of the dropouts and 15 percent of the graduates missed 16 or more days of school per year. Walsh (1961) reported that more than one-third of the dropouts, and one-tenth of the graduates, were absent as many as 19 days during their last two semesters in school. Stevens reported significant differences in absence records of dropouts and graduates. Sullivan (1964) found that dropouts accounted for 84 percent of absences during their last year of attendance.

Van Dyke and Hoyt (1959) found that dropouts were absent an average of 15 out of 180 days, compared with an average of 6 out of 180 for persisters. Howard (1972), in a study of dropouts and graduates in the Colorado School District, found that 53 percent of the dropouts missed 16 - 26 days in the school year while only 9 percent of the graduates missed that much. Nelken and Gallo (1978) in a study of California High School students found that 96 percent of the dropouts had irregular attendance. They concluded that irregular attendance should be seen as a sign that the student is becoming less interested in school, is having school related problems, or is having family problems. Diggs (1979) states that excessive absenteeism promotes disinterest because the student begins to fall behind his contemporaries, and the end result is voluntary withdrawal or termination by the school.

It appears from the above-mentioned studies that students at the junior-senior high level who attend classes regularly increase their chances of graduating more often than students who do not. No studies have been done at the community college level which focused on attendance at classes. This present study attempted to investigate whether there is a significant difference between graduates and non-graduates with respect to attendance at classes.

TIME SPENT ON ASSIGNMENTS AND STUDY

Several studies (Shimron, 1973; Good and Beckerman, 1978; King, 1979); have shown that the more able student, in terms of academic ability, spends more time working on assignments than the less able student. The less able student spends more time in off-task related activities. Good and Brophy (1980, pp.236-237) have stated that because lows (less able students) appear to spend less time working and less time thinking about classroom assignments, it would seem likely that the achievement differences between highs (more able students) and lows will widen with time. "To make the situation more difficult, it is likely that as lows fall farther behind they will feel worse about their classroom status and make even less effort." (p.237)

Although it appears that more able students spend more time doing assignments than the less able students, no mention is made whether graduates spend more time doing assignments than non-graduates. This study attempted to investigate whether there is a significant difference between the graduate and non-graduate with respect to the amount of time spent to doing assignments.

PART-TIME JOB AND STUDENT RETENTION

O'Banion and Thurston (1972, pp.15-16) found that 63 percent of junior college (Community College) students work while attending college while only 18 percent of senior college and university students do. Astin, Panos and Reager (1967), suggest that the reasons for students dividing their time between work and college are partly due to financial need, and partly the fact that they discount the seriousness of the enterprise.

A few studies (Knoell and Medsker, 1965, O'Banion and Thurston, 1972) indicate that part-time work interferes negatively with a student's academic achievement and persistence in junior college. O'Banion and Thurston (1972, p.16) state that there is no evidence that working while enrolled in a junior college builds character, but there is evidence that it results in lower academic achievement and a higher dropout rate.

Several studies (Schreiber, 1965; Kosherand and Bellamy, 1969; Monroe, 1972; Astin, 1972, 1975) indicate that a part-time job in which a student spends less than twenty hours per week will actually have a positive influence on the student's academic performance and his persistence in college. Astin (1975) found that students who worked on the university's or junior college's campus had an excellent chance of finishing college. Schreiber (1965, p.90) found that graduates who held part-time jobs while attending school fared better in the job market after leaving school than those who did not.

It appears that some researchers believe that a part-time job interferes negatively with a student's progress while others believe that part-time job (less than 20 hours per week) actually increases the

possibility that a student will graduate. This present study investigated whether there is a difference between graduates and non-graduates with respect to a part-time job while attending the community college.

EXTRACURRICULAR ACTIVITIES

Nearly all studies (high school and post-secondary school) investigating this factor reported non-participation in extracurricular school activities as being characteristic of the school dropout. Snepp (1956) reported that 79 percent of the dropouts "avoided" extracurricular activities. Dillion (1949) found that of 798 dropouts, 73 percent had never participated in an extracurricular school activity, one-fourth had participated in one or two, and only two percent in two or more. Bowman and Matthews (1960) noted that although participation was less frequent among dropouts, the pattern of participation for both groups was about the same. Walsh (1961) reported that 76 percent of 127 dropouts and 15 percent of 913 graduates participated in no extracurricular activities; 55 percent of graduates and 2 percent of dropouts participated in three or more. Sullivan (1964) reported that 52 percent of the male dropout and 43 percent of the female dropout had not participated in any outside class activities. Howard (1972) found that 86 percent of the dropouts did not take part in extracurricular activities while Nelken and Gallo (1978) found that 79 percent of dropouts did not participate in extracurricular activities. Astin (1975) found that participation in varsity athletics reduces chances of dropping out by 1 percent for white men and 5 percent for white women and blacks in white colleges. Membership in fraternities or sororities is associated with even further reductions,

from 6 to 9 percent for all groups. He concluded that a student's chances of staying in college is enhanced by involvement in extra curricular activities. Cervantes (1965) explains the influence of extra-curricular activities upon student retention by saying:

Participation in school activities gives the youth a role, a conversation piece, an identification, a comradeship, a support for his academic orientation, a feeling of kinship with the administration and their goals, a sense of accomplishment, a chance for self development and recognition (p.103).

Astin (1975) states that extracurricular activities provide some of the most significant consequences of college attendance, and that they sometimes offer an opportunity to develop skills that are more relevant to later life than the knowledge and cognitive skills acquired in the classroom. With this in mind, he recommends that institutions should increase opportunities for extracurricular activities, facilitate entry with such activities and encourage students to take part.

The evidence is overwhelming that students at the senior high and four-year level who participate in extracurricular activities tend to graduate more often than those who do not. However, there is no evidence at the community college level to support the above finding. This study investigated whether there is a significant difference between graduates and non-graduates with respect to participation in extracurricular activities.

PLACE OF RESIDENCE WHILE ATTENDING COLLEGE

Numerous studies suggest that dormitory living enhances college persistence at the four-year college and university (Alfert, 1966; Kramer and Kramer, 1968; Astin and Panos, 1969; Astin, 1973, Chickering, 1974;

Hannah and Cope, 1975). The only type of institution in which dormitory living does not have a positive impact is the two-year college (Astin, 1973; 1975). "This effect," according to Astin (1975), "is largely attributable to a handful of such schools with residential facilities."

When living with parents are compared to living in a private room or apartment, Astin (1975) found that students' chances of persisting were decreased by 16 percent for men and increased by 8 percent for women attending four-year colleges. The difference between the effects for men and women is dramatic. Regardless of type of institution, living in a private room or apartment rather than with parents is beneficial to men and detrimental to women (Astin, 1975). For men, getting away from the home environment may facilitate greater involvement in campus and academic life. Women living away from home for the first time in a private room may not be able to handle the interpersonal peer pressure associated with such an acute shift in degree of independence. The resulting stress not only may detract from their ability to cope with academic work, but may also pressure them to leave college for the more supportive home environment.

Since of all the above cited studies dealt with the four-year college, this study investigated whether there is a significant difference between graduates and non-graduates with respect to place of residence while attending the community college.

STUDENTS PERCEPTIONS

When a careful examination is made of the studies (mainly at the four-year college level) that deal with students' perceptions of parental interest in education, of themselves, and of the college environment

which consists of the organizational structure, counselors, instructors, administrators, courses, size of college and the general atmosphere, it is not surprising to find that graduates tend to have more favourable perceptions than non-graduates.

PERCEPTION OF PARENTAL INTEREST

Among the many complex psychological and social-environment factors contributing to the successful motivation of students, the influence of the parents is of paramount importance. Sanford (1967, p.641) states that parents occupy key positions in the wider circles of the influences upon the changing motivations of the college students. Trent and Medsker (1968) stress time and again the importance of the parents in determining the goals and values of the children. Also, the parental factor seems to be a decisive one in influencing a young person to go to college and stay in college. "The indicators are strong that the academic orientation for a successful completion is extensively derived from very early family environment and beginning school experiences" (Trent and Medsker, 1968; p.127).

Johnson (1970) found that when relations with parents were warm and friendly, students were more apt to continue pursuit of their academic careers. Although about 70 percent of a freshman sample admitted to being homesick (Lokitz and Sprandel, 1976), they continued because of the continued support that they received from their parents. Several studies (Schreiber, 1966; Cross, 1968; Medsker and Trent, 1968; Monroe, 1972; Astin, 1975) have found that parents of graduates are more positive toward the importance of education for their children than are parents of

non-graduates. This present study investigated whether there is a significant difference between graduates and non-graduates at the community college level with respect to perceived parental interest.

SIZE OF COLLEGE

There appears to be conflicting results with respect to size of college and attrition. Nelson (1966) found that smaller colleges have lower dropout rates than larger institutions, while Kamens (1971) found that there is a tendency for larger institutions to have better retention rates. There are still other studies (Slocum, 1956; Panos and Astin, 1967) which indicate that school size makes no difference with respect to the percentage of graduates and non-graduates.

This present study investigated whether there is a significant difference between graduates and non-graduates with respect to their perception of the appropriateness of size of college.

COUNSELLING AND PERSISTENCE

In many community colleges across Canada and the United States, counselling has become a very significant and integral support service in the life of the institution. Several researchers and educators have testified to the positive contribution of counselling (Demos, 1968; Bednar and Weinburg, 1970, O'Banion and Thurston, 1970; Diggs, 1979; Dwight, 1979; Grites, 1979; McCuster and Osterlund, 1979).

Charles Davis, Director of Parks College in Denver, says: "The biggest thing at Parks that has led to significant reduction of our dropout rates is the concept of qualified counselors" (cited in Diggs, 1979, p.134). McCuster and Osterlund (1979) of Linn-Benton Community College

write:

Because advising is one of the students first experience at Linn-Benton Community College, we feel it influences the success of our students. If the advising experience is a successful one, it will set a positive tone for the students' further educational experience (p.34).

Roueche and Kirk (1973) state that successful learning experiences can best be facilitated by a competent teaching staff and an "equally competent counselling staff" (p.5). Demos (1968, p.684) in a study of the real reasons why students withdraw from colleges and universities found that at least 10 percent of the potential dropouts, after talking to counselors, refrained from dropping out. Schreiber (1965) said that several dropouts wished they had more opportunities for discussion with counselors.

It appears that several students who need to make use of the counselling services do not. Motto (1959) found that twenty-five of the thirty-one low performing subjects had not voluntarily sought the aid of the counselling services of the colleges. Tseng and Thompson (1968) found that significantly fewer school dropouts sought counselling services as compared with non-dropouts. Students who need to make more use of the counselling facilities and do not, may do so for several reasons such as: the unsuitable location of counselors, the student's perception of the inability of the counselor to assist him (Vontress, 1970, 1971), the student's fear and distrust (especially among minority groups) of the counselors (Tucker, 1973). Some students may even be unaware of such services (Dwight, 1971).

A study by Dwight (1971) showed that only 66 percent of the students at Essex Community College in Baltimore indicated an awareness of counseling

services. Several institutions are attempting to provide minority group counselors. The rationale for this is that these counselors may be able to break through the communications barrier between the particular minority group (e.g. blacks, Chicanos) and whites, (Pulliams, 1977; Kropf and Coe, 1979) and as a result, increase the retention rate of minority group students which are exceedingly low at post secondary institution (Astin, 1975).

A study by Gold and Ware (1971) examined the peer counselling program at Los Angeles City College where the black student counselors were helping with registration leading to study sessions, and conducting interviews. This study found that the peer counselors significantly increased the academic performance and reduced the dropout rate of the black students. A recent article in the Winnipeg Free Press (Oct. 1981, p.3) states: "Fewer native students are dropping out of Winnipeg high schools since the inception of native control over the students' counselling and placement program. . . until 1979 the dropout rate of students from council reserves was more than 50 percent. But last year the figure fell to less than 10 percent."

It appears from these studies that the percentage of non-graduates may be reduced if more students who need help visit the counselors more frequently. Secondly, minority group counselors may be beneficial in helping to reduce the attrition rates of minority students.

This present study investigated whether there is a significant difference between graduates and non-graduates with respect of their perception of counselors.

INSTRUCTORS AND RETENTION OF STUDENTS

Instructors play a very significant role in either increasing or decreasing the holding power of schools. Many students leave a school because of an instructors' attitudes, skills, or knowledge or a combination. Howard (1972, p.10) states that two prime causes of student dropouts relate to the teaching ability of the staff and out-moded instructional procedures. Nelken and Gallo (1978), in a study of high school dropouts in California, found that 63 percent of the dropouts stated that the instructors were "insincere and lacking teaching ability." Cervantes (1965, p.112) describes "disintegrated teacher-student relationship" as a primary cause for student withdrawal. Diggs (1979, p.102), states that no single factor will cause a mass exodus from schools as will inferior instruction.

Perhaps many instructors in traditional programs do not yet accept "their role as one of helping students succeed" (Roueche, 1973). Today, many classrooms "produce more feeling of failure than success" (Covington and Berry, 1976; p.90). Glasser (1969, p.3) who supports such a view states: "We must develop schools where children (students) succeed." If instructors are to reduce attrition rates in schools, they must be "thoroughly qualified, possess a dynamic personality, great patience, and skill in presenting the subject matter both theoretically and practically with techniques that reach every student in the class and make each one want to learn" (Diggs, 1979, p.102).

Many students look to their teachers as models. Good and Brophy (1980, p.340) have stated that teachers can accomplish a great deal in the classroom by tapping their potential for influencing behavior through modeling, especially if they lean to model consciously and systematically. They further explain this by saying ...

This implies that teachers who form personal relationships with their students and become the kinds of individuals that the students look up to and want to be like are more apt to be imitated than teachers who remain at a distance or stress the contrasts between themselves and their students. . . This implies that teachers must retain students' respect and perhaps also a degree of professional distance, but still be friendly and attractive enough to make students want to be like them (p.341).

Nelken and Gallo (1978) found that 80 percent of the graduates had a favourite teacher while less than 20 percent of the dropouts had one. They also found that students who had a favourite teacher attended more regularly than those who did not. It appears then that if students perceive teachers as models, the students' chances of graduating would increase.

The present study investigated whether there is a significant difference between graduates and non-graduates with respect to the perception of their instructors.

STUDENT-INSTRUCTOR INTERACTION AND STUDENT PERSISTENCE

Numerous studies at the senior college level have consistently shown that students' non-classroom interaction with instructors increase their chances of persisting in college (Feldman and Newcombe, 1969; Spady, 1971; Tinto, 1975; Pascarella and Terenzini, 1977). Both Spady (1971) and Tinto (1975) suggest that interaction with instructors not only increases social integration and therefore institutional commitment, but also increases the individual academic integration. Centra and Rock (1971) found that frequency of informal contact with instructors is positively related to student achievement and intellectual gains, while Feldman and Newcombe (1971) found that informal contact increases the student's social structure and persistence in college.

Wilson, Gaff, Dienst and Bavry (1975) found two conceptual problems that clouded the findings of those studies which showed an association between student-instructor interaction and persistence. First, the nature and frequency of student-instructor interactions were, in large measure, a function of the characteristics of those people involved in the interaction. They found evidence to suggest that students with a high frequency of informal contact with faculty had entering characteristics and orientations somewhat more consistent with those of their institution's instructors than did those students reporting little or no contact. Secondly, they stated that no attempt had been made to examine different types of student-instructor interactions with respect to their pattern of associations with college persistence.

Pascarella and Terenzini (1977), after controlling for the effects of the following initial student characteristics such as sex, academic aptitude, and personality needs, still found that informal contact with instructors during the freshman year increased students' persistence in college. They also found that contacts focusing on intellectual or course related matters clearly contributed most to the discrimination between persisters and voluntary leavers.

They have suggested that institutions should take steps which will positively influence the frequency of student-instructor interaction independent of initial student characteristics. For example, they stated: "the personal orientations and characteristics of instructors to whom freshmen are exposed early in their academic experience may be an important determinant of students, subsequent willingness to seek contact with the instructors beyond the classroom" (p.552).

Findings by Wilson, Wood and Gaff (1974) indicated that those faculty who were frequently sought out by students beyond the classroom tended to provide clear clues as to their social - psychological accessibility for such interaction through their in-class teaching styles and attitudes.

It appears from the studies cited at the four-year college level that the more often students interact informally with their instructors, the possibility of graduating increases. This present study investigated whether there is a significant difference between graduates and non-graduates with respect to student-instructor informal interaction.

SELF CONCEPT AND ACADEMIC ACHIEVEMENT

The self is a complicated subjective system that a student brings with him to school. A student's concept of himself or his self concept will, to a great extent, determine how well or how poorly he will perform academically. Some studies done at the University of Texas (Roueche, 1973) seem to indicate that a student's self concept of his ability to succeed in his learning environment may be more significant than his high school grade point average, his standardized achievement test or college achievement test score, or any other academic predictor. West and Fish (1973), like Covington and Berry (1976), found that there is a mutual relationship between self concept and academic performance. Success in academic achievement generates a positive self-concept and vice versa.

Several studies on self concept and academic achievement have consistently shown that students with a high self concept perform better academically than students with a poor self concept (Webster, 1953;

Borislow, 1962; Brookover, 1964; Payne and Farquhar, 1962; Chabazi, 1971; Aniseff, Paasche and Turritin, 1979). This was found to be consistent at all levels of schooling, elementary (Reeder, 1955; Wattenburg and Clifford, 1964; Campbell, 1966) junior and senior high (Fink, 1962; Brookover, 1964; Dyson, 1967); and college (Borislow, 1962; Chabazi, 1971; Pulliams, 1976). However, there is very little information on self concept at the community college level particularly the self concept of graduates and non-graduates.

A monumental research effort by Brookover and his colleagues (1964) involving over 1,000 seventh grade students focused specifically on self concept of ability in school and academic achievement. They found a significant and positive relationship between self-concept and academic performance and, in addition, observed that self concept was significantly and positively related to the perceived evaluations that significant others held. In the second and third stages of the study, they studied students in grades seven to nine, and ten to twelve. In both stages, they found similar results to the initial study.

Borislow (1962) in his investigation of relationships between self evaluation and academic achievement among 197 college freshmen observed that students who under achieve scholastically have a poorer concept of themselves as students than do achievers. Pulliams (1976) did a study in which he compared the self-concept of successful black community college students to that of failing black community college students. He found that the failing students consistently showed a lower self concept than the successful students. Studies by Fifield (1963), Beaird (1964) and Tseng (1972), found no significant differences between high school dropouts and non-dropouts on patterns of self concept.

It appears from all of the above studies which dealt with the student self-concept that students increase their chances of graduating if they have a positive self-concept. While there are several studies done at the junior-senior high and the four-year college levels on self-concept, there is a scarcity of such studies at the community college level. This present study investigated whether there is a significant difference between the graduate and non-graduate with respect to their self-concept.

LEADERSHIP STYLES IN THE CLASSROOM

Several studies (Lewin, Lippitt and White, 1939; Baumrind, 1971; Gordon, 1974) have shown that authoritative leadership in comparison to authoritarian and laissez-faire leadership styles, "produces positive attitudes and good group relations," although at some cost in efficiency (Good and Brophy, 1977; p.326). Laissez - faire leadership is generally ineffective while authoritarian leadership is efficient but otherwise unattractive.

Good and Brophy recommend that teachers use an "authoritative" teaching style in preference to the other two. In an authoritative teaching style, the instructor solicit input, seek consensus, and take care to see that everyone understands the rationales for decisions as well as the decisions themselves. Good and Brophy (1977, p.327) also state that authoritative methods are not merely better perceived, they are more effective in building the cognitive structures and behavior control mechanisms with children (students) that enable them to become both independent and responsible in managing their affairs.

It appears from the above mentioned researches that authoritative teaching styles tend to produce the best results when compared to authoritarian and laissez - faire teaching styles. This study investigated whether there is a significant difference between graduates and non-graduates with respect to the perception of the instructors teaching styles.

COMMENTS ON TESTS AND ASSIGNMENTS

Several studies (Page, 1968; Logan Fuller and Deneby, 1976) have shown that well organized written comments on students' tests and assignments can have a significant positive effect on students' performance and retention.

In a study by Page (1968), teachers in 74 classes, in grades seven to twelve, were asked to administer an objective test to their classes, to place the score and grade on each paper, and then to randomly assign the papers to one of three groups. Group 1 papers received no comment beyond the score and grade assigned to all papers. Group 2 papers received general and encouraging comments, like "Good work. Keep at it." Group 3 papers received the specific comment the teacher thought desirable under the circumstance. A later follow-up with a second objective test showed that the highest scores were achieved by the pupils who had received the specific comments (Group 3), the next highest by those given the general comments (Group 2), and the lowest by those receiving no comment on their papers (Group 1). The motivating effect of the comments did not appear to be dependant on the school, grade level, or ability of the pupil. "To be most effective," state Blair, Jones and Simpson (1975), "feedback to the learner should be immediate, as well as specific."

As can be seen by Page's study, constructive written comments on students' assignments and tests can have a positive effect on learning and retention. This study investigated whether there is a difference between graduates and non-graduates with respect to their perception of instructor's written comments on their test papers and assignments.

CHAPTER III

METHODOLOGY

This chapter deals with a description of the subjects, the instrument, and procedure related to data collection. A section is devoted to the non-respondents of this study, and another section deals with descriptive and inferential statistics.

SUBJECTS

The subjects (N=250) of this study consisted of a random selection of 125 graduates and 125 non-graduates of Red River Community College, Winnipeg, Manitoba, who:

1. registered in September 1979 for a two year course
2. registered in or after September 1980 for a one year course or less.

These students did not include those who registered in September 1979 for a one year course or less, nor did it include those who registered in September 1980 for a two year course. All students in (1) and (2) above were eligible to graduate in June 1981.

A listing of all graduates and non-graduates was obtained from the Registrar's Office of Red River Community College.

INSTRUMENT

The questionnaire was designed in such a manner so as to allow easy checking of responses by the students and to enable computer tabulation. Many questions on the questionnaire were taken from other researches such as Mundell (1972), British Columbia Research (1973), Astin (1975), Tuckman (1975), Pascarella and Terenzini (1977) and the Research Branch, Manitoba Department of Labour and Manpower (1980). Of course, these questions were modified so as to be appropriate for this particular study.

Several questions (Q 19-28; Q 36-42; Q 44-47) were designed by the researcher. The questionnaire was divided into three main sections: demographic variables, personal characteristics, and student perceptions. Demographic variables (Q 1 to Q 17) included such variables as sex, age and marital status, level of parental educational education and student's pre-community college grade point average. Personal characteristics (Q 18 to 26) included variables such as time management, with respect to attendance of classes, study and assignment, participation in extracurricular activities and doing a part-time job. Student perceptions included variables such as appropriateness of size of college, organizational structure of college with respect to administrators, counsellors and instructors.

The questionnaire, which was administered to the sample, is represented in Appendix C, while the letter which accompanied the questionnaire is represented in Appendix A.

PILOT TESTING THE QUESTIONNAIRE

The questionnaire was sent to twelve people to complete. Eight out of the twelve people were part of the intended test population (five graduates - three males - two females, and three non-graduates - 1 male and 2 females) but not part of the sample.

The other four people included one instructor at the Faculty of Education, University of Manitoba, and three instructors at Red River Community College. All questionnaires, except one, were completed and returned.

The purpose of the pilot test was to determine:

- (a) whether questionnaire items possess the desired qualities of measurement and discriminability
- (b) content validity
- (c) the approximate time that it took to complete.

Space was provided on the last page of the questionnaire where the respondents were asked to make comments about the questionnaire itself (e.g. number and ambiguity of question), whether provisions should be made for certain responses that were not included.

Discussion

After receiving the completed questionnaires, telephone calls were made to six of the respondents to ascertain whether they understood what each question meant. There appeared to be no difficulty in responding to the questions. One adjustment was made based on feedback from one respondent.

PROCEDURE RELATED TO DATA COLLECTION

The mail survey technique was used to collect the data. Two hundred and fifty questionnaires were sent on March 10, 1982 to the selected students who were asked to complete the questionnaire and to return same by March 29, 1982 in an accompanying self-stamped and addressed envelope. A letter which explained the purpose of the study was attached to the questionnaire. Every student was identified by a number assigned by the researcher so as to identify the respondents and non-respondents.

Those who did not return the completed questionnaire by March 29, 1982 was sent a second questionnaire with another self-stamped and addressed envelope and a reminder to complete and return by April 17, 1982. About fifty telephone calls were made to urge non-respondents to complete the questionnaire. After April 17, no more questionnaires were sent and no further attempt to contact non-respondents was made.

RESPONSE RATES

By the end of the first deadline (March 29), 110 completed questionnaires (75 graduates and 35 non-graduates) and 26 uncompleted questionnaires (address unknown - 4 graduates and 24 non-graduates) were received. By the end of the second deadline (April 17), an additional 29 completed questionnaires were received (15 graduates and 14 non-graduates). The response rates are summarized in the table 3 below.

TABLE 3
RESPONSE RATES FOR 1981 GRADUATES AND NON-GRADUATES

	Number Sent Out	Number not Located	Number returned (completed)	Response Rate
Graduates	125	4	90	$\frac{90}{121} = 74.4\%$
Non-Graduates	125	22	49	$\frac{49}{103} = 47.6\%$
Total	250	26	139	$\frac{139}{224} = 62.1\%$

NON-RESPONDENTS

There were 111 non-respondents in this study. From this number, 26 questionnaires were returned because of "incorrect address". Therefore, 85 questionnaires (31 graduates and 54 non-graduates) were not completed. As can be seen, the non-graduate non-respondent exceeded the graduate non-respondent.

This is not surprising because the graduate student is usually willing to assist in the completion of a questionnaire pertaining to his past school (Rosenthal and Rosnow, 1975). Rosenthal and Rosnow (1975) also found that although respondents and non-respondents do not differ on any significant personality dimensions, non-respondents tend to have achieved less academic success than respondents.

It appeared that some of the non-respondents who were contacted, via the telephone, were generally unhappy with their college experience. They treated the request to complete the questionnaire as more intrusion into their life which they resisted.

DESCRIPTIVE AND INFERENCE STATISTICS

The tabulation of the results was done by the computer using the SPSS system at the University of Manitoba. Both descriptive and inferential statistics were used. Descriptive statistics were used for particular variables (such as variables 001 to 016, 021 to 022, 098 to 112) where a frequency and percentage were only needed. The t-test was used wherever the mean of the graduates (as a group) was to be compared to the mean of the non-graduates (as a group) to decide whether graduates differed significantly from non-graduates for a particular variable.

All results are tabulated as can be found in tables 4 to 32.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter deals with an analysis of the collected data in terms of descriptive and inferential statistics. The discussion follows the sequence in which the purpose of the study, and the research questions were stated on page 6. The research questions, which were divided under three main headings: demographic variables, personal characteristics and student perceptions, followed the same sequence in the questionnaire.

An attempt has been made to give some of the relevant descriptive statistics for the variable under discussion, and also to state whether there was any significant difference between graduates and non-graduates with respect to the variable, and finally, to cite some studies which the present results supported or did not support. Both descriptive and inferential statistics have been tabularized. There are descriptive statistics for every variable (N=112) while only those variables or groups of variables which show significant differences are tabularized. The t-test was used to determine which variables or groups of variables were significant at the 0.05 level.

DEMOGRAPHIC VARIABLES

Qu.1. Was there a significant difference between graduates and non-graduates at the community college level with respect to sex, age and

marital status?

a) SEX

Males outnumbered females in the total sample by 61.9 percent to 38.1 percent (Table 4). There was also a larger percentage of male graduates (55.6%) and non-graduates (73.5%) than female graduates (44.4%) and non-graduates (26.5%). This can be expected since there were more male than female students at RRCC (RRCC, Statistical Office: 1980-81). There was a significant difference (Table 11) between graduates and non-graduates with respect to sex ($t=2.10$, $df=137$, $p<0.05$). The above - mentioned results support the studies of Medsker (1960), and Medsker and Tillery (1971) who state that male students outnumber female students in the community colleges, and Astin (1975) who found that a higher percentage of male students withdrew or failed (non-graduates) when compared to female students. The results also supported the studies of Bemis (1962), and Cope and Hannah (1975) at the four year college and university level.

b) AGE

An analysis of Table 4 will show that 39.6 percent of the total sample belonged to the 19-21 years age group. Forty two point two percent of graduates and 34.7 percent of non-graduates belonged to this age group. Sixty percent of the sample were 22 years or younger while 16.5 percent were over 28 years old. Of the 23 students (over 28 years old) who completed the questionnaire, 65 percent had graduated.

Because of tough economic times and the high unemployment rate across Canada (Statistics Canada, The Labour Force, March, 1982), community colleges can expect a large increase in the number of "older"

TABLE 4

Frequency and percentage of graduates and non-graduates according to sex, age, and marital status.

Variable	Sub-Group	Graduate		Non-graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Sex (VAR002)	Male	50	55.6	36	73.5	86	61.9
	Female	40	44.4	13	26.5	53	38.1
Age (VAR003)	16 - 18 years	16	17.8	12	24.5	28	20.1
	19 - 21 years	38	42.2	17	34.7	55	39.6
	22 - 24 years	12	13.3	9	18.4	21	15.1
	25 - 27 years	9	10.0	3	6.1	12	8.6
	28 or over	15	16.7	8	16.3	23	16.5
Marital Status (VAR004)	Single	62	68.9	35	71.4	97	69.8
	Married	21	23.3	7	14.3	28	20.1
	Divorced	3	3.3	0	0.0	3	2.2
	Separated	4	4.4	7	14.3	11	7.9
	Other	0	0	0	0	0	0

Graduate N = 90, Non-Graduate N = 49, Total Sample N = 139.

students. In this particular study, 25.1 percent of the sample were over 25 years. That means that 1 student out of every 4 students at RRCC (based on the sample) was over 25 years old. The above-mentioned results partially supported the studies of Koos (1970), and Monroe (1972) but not the study of Anderson (1976). There was no significant difference between graduates and non-graduates with respect to age.

c) MARITAL STATUS

Single students far outnumbered married students (69.8% to 20.1%) in the total sample. Single students contributed 68.9 percent of the graduates (Table 4) while married students contributed 23.3 percent. The ratio of married graduates to married non-graduates was 3:1 while that for single graduates to single non-graduates was less than 2:1. These results generally supported the findings of Wise (1958), Medsker (1960), and Medsker and Tillery (1971) who stated that about 22-23 percent of community college students are married. There was no significant differences between graduates and non-graduates with respect to the above-mentioned variable.

DIVISION ENROLLED IN AND LENGTH OF PROGRAM:

A large percentage of respondents (51.8%) and graduates (51.1%) came from the Business and Applied Arts Division, followed by Industrial Technology with 39.6 percent and 41.1 percent. Health Sciences had the lowest percentage of respondents (8.6%) and graduates (7.8%). This is a little surprising since the greatest percentage of students were registered in the Industrial Technology Division, followed by Business and Applied Arts and Health Sciences (RRCC, Statistical Office: 1980-1981).

A substantial percentage of respondents (42.4%) had enrolled in one-year courses while an almost equal percentage was enrolled in two-year courses (29.5%), and courses requiring less than one year to complete (28.1%). It was interesting to note that while the two-year and less than one-year courses had an almost equal percentage of respondents, a greater percentage (33.3%) in the two year courses graduated when compared to the less than one year courses in which 25.6 percent graduated.

It seemed that courses which required one year to complete was more suitable than either the two-year or the less than one-year courses. It also appeared that a larger percentage of students would graduate from two-year courses than from less than one-year courses.

Qu.2. Was there a significant difference between graduates and non-graduates at the community college level with respect to sources of funds and financial situation?

a) SOURCES OF FUNDS

When sources of funds were ranked, Manpower (48.9%) was ranked highest, with personal savings (38.1%) second, and part-time job (32.4%) third, followed by parents (20.9%). A small percentage of respondents got aid from scholarship sources (1.4%), from loans (11.5%) and from their spouses (4.3%). The federal government was still the biggest financial supporter of students at RRCC. Fifty percent of graduates and an almost equal percentage of non-graduates received financial aid from Manpower. Of the total number of students who received parental aid, approximately 72.5 percent graduated. Sixty percent of those who worked part-time graduated. It appeared then that a combination of aid from Manpower and parents or a part-time job would increase the pos-

sibility of a student graduating.

FINANCIAL SITUATION

It was not surprising that 60.4 percent (Table 5) of the respondents stated that they had adequate funds to complete their courses because almost half the respondents (48.9%) got financial aid from Manpower. Several others also had part-time jobs and 38.1 percent of the respondents had personal savings. Fourteen percent had more than adequate funds while 25.2 percent stated that they had inadequate funds. It appeared that 3 out of every 4 respondents had sufficient funds to complete their programs. Even of those who did not graduate, 57 percent stated that they had adequate funds.

Financial difficulty then should not, as a result, rank very high as a reason for students withdrawing from college. There was no significant difference between graduates and non-graduates with respect to financial situation at the time of college attendance.

- Qu. 3. Was there a significant difference between graduates and non-graduates at the community college level with respect to parental education, occupational levels, and educational level of an older brother or sister?

a) PARENTIAL EDUCATION

The majority of respondents had a father whose educational level was either junior high (35%) or senior high (36%). Eight percent had a father with a community college education while another eight percent had a father with a university degree. A similar percentage distribution was found for the level of education of mothers. (Table 7).

TABLE 6
 Frequency and percentage of graduates and non-graduates according to source of income
 and financial situation

Variable	Sub-Group	Graduate		Non-graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Source of Income (VAR007 to VAR016)	Personal Saving	39	43.3	14	28.6	53	38.1
	Full-time job	3	3.3	2	4.1	5	3.6
	Part-time job	27	30.0	18	36.7	45	32.4
	Parents	21	23.3	8	16.3	29	20.9
	Spouse	5	5.6	1	2.0	6	4.3
	Loan	11	12.2	5	10.2	16	11.5
	Scholarship	1	1.1	1	2.0	2	1.4
	Bursary	7	7.8	2	4.1	9	6.5
	Manpower	45	50.0	23	46.9	68	48.9
	Other	9	10.0	1	2.0	10	7.2
Financial Situation (VAR017)	Inadequate fund	14	15.6	21	42.9	35	25.2
	Adequate funds	59	65.6	25	51.0	84	60.4
	More than adequate	17	18.9	3	6.1	20	14.4

There was no significant difference between the educational levels of the parents of graduates and non-graduates. For example, 42.2 percent of graduates had mothers with a senior high education while 38.8 percent of non-graduates had mothers with the same educational level. Thirty percent of graduates had fathers with a junior high education while 32.7 percent of non-graduates had fathers with the same level of education. Eleven percent of graduates had fathers with a university degree while only two percent of the non-graduates had fathers with a similar educational level. These results supported the studies of Boggan (1955) but not the majority of studies which showed that there was a significant difference between the education levels of parents of graduates and non-graduates.

b) EDUCATIONAL LEVEL OF SIBLING

It appeared from the results that an older brother or sister had a higher level of education than either parents (Table 7). For example 29.3 percent of respondents had a sibling with a university degree, and 23.7 percent had one with a community college education. This compared with 8 percent for fathers, and 8 percent for mothers with a university degree and 8 percent for fathers and 7.2 percent for mothers with a community college education. This result was not surprising since more parents at present are sending their children for further schooling (Monroe, 1972). There was a significant difference ($t=3.50$, $df=125$, $p<0.05$) between graduates and non-graduates with respect to the educational level of an older brother/sister (Table 11).

TABLE 7

Frequency, percentage of graduates and non-graduates according to highest level of education of parents and family member.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample		
		Freq.	Percent	Freq.	Percent	Freq.	Percent	
Level of Education (VAR018 to VAR019)	Elementary	Father	11	12.2	7	14.6	18	30.0
		Mother	9	10.0	9	18.4	18	12.9
		Brother/ Sister	1	1.2	1	2.2	2	1.6
	Junior High	Father	33	36.7	15	31.3	48	34.8
		Mother	27	30.0	16	32.7	43	30.9
		Brother/ Sister	1	1.2	9	20.0	10	7.9
	Senior High	Father	29	32.2	21	43.8	50	36.2
		Mother	38	42.2	19	38.8	57	41.0
		Brother/ Sister	27	32.9	17	37.8	44	34.6

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c) OCCUPATIONAL LEVEL OF PARENTS

Mothers still tended to occupy the traditional role as housewife (37.4%). Ten percent had clerical jobs, 8 percent had professional jobs, and 7 percent had managerial jobs. (Table 8) Eighteen percent of the fathers had skilled jobs and an equal percentage had managerial jobs. Seven percent were farmers and an equal percent had transport related jobs. Twenty-nine percent of graduates had parents with managerial jobs, 18 percent with professional jobs, 20 percent with skilled jobs, and 9 percent with technical-related jobs. In contrast, 14 percent of non-graduates had parents with managerial jobs, 4 percent with professional jobs, 16 percent with skilled jobs, and 2 percent with technical related jobs. From these results, it appeared that a greater percentage of the parents of graduates had managerial, professional, skilled and technical related jobs when compared to the parents of non-graduates.

Qu. 4. Was there a significant difference between graduates and non-graduates at the community college level with respect to years out of school?

YEARS OUT OF SCHOOL

Twenty four point five percent of the respondents came to RRCC directly from the public school without staying away for any period of time (Table 10) Thirty point nine percent stayed out 1 - 2 years before attending RRCC. Therefore, 55.5 percent of the respondents came to RRCC immediately or soon after leaving the public school system. Twenty-four point five percent attended RRCC after leaving the public school for seven years or more. Some

TABLE 8

Frequency and percentage of graduates and non-graduates according to parental occupation.

Variable	Sub-Group	Graduate				Non-Graduate				Total Sample		
		Freq.		Percent		Freq.		Percent		Father	Mother	Frequency
		Fa.	Mo.	Fa.	Mo.	Fa.	Mo.	Fa.	Mo.			
Parental Occupation (VAR021 to VAR022)	Clerical	0	9	0.0	10.0	0	5	0.0	10.2	0	14	
	Farmer	7	2	7.8	2.2	3	1	6.1	2.0	10	3	
	Managerial	18	8	20.0	8.9	5	2	10.2	4.1	23	10	
	Miner	1	0	1.1	0.0	1	0	2.0	0.0	2	0	
	Professional	8	9	8.9	10.0	0	2	0.0	4.1	8	11	
	Sales	0	6	0.0	6.7	2	1	4.1	2.0	2	7	
	Semiskilled	2	4	2.2	4.4	3	2	6.1	4.1	5	6	
	Service	3	1	3.3	1.1	3	7	6.1	14.3	6	8	
	Skilled	18	0	20.0	0.0	7	1	14.3	2.0	25	1	

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of these people probably went into the workfield and worked for a while then decided to return to the community college for upgrading in their particular jobs. This percentage (24.5%) corresponded to the 25 percent of the respondents who were 25 years or older (Table 4), at the time of attendance at RRCC.

There was no significant difference between graduates and non-graduates with respect to years out of school. For example, thirty percent of graduates stayed out 1 - 2 years before enrolling while 32.7 percent of non-graduates did. Nineteen percent of graduates stayed out eight years or more before enrolling while 16 percent non-graduates did.

Qu.5. Was there a significant difference between graduates and non-graduates with respect to precommunity college academic background?

a) HIGHEST LEVEL ATTAINED BEFORE ATTENDING RRCC

Forty-eight point six percent (Table 9) of the respondents completed grade twelve before attending RRCC while 12.3 percent had completed grade eleven. Therefore, over 60 percent of the respondents had between grade eleven and grade twelve. A few students (12.5%) had some university education before attending RRCC. Graduates consistently showed higher education levels than non-graduates. For example, 53.3 percent of the graduates had grade twelve, and 8.9 percent had a university degree while 39.6 percent of the non-graduates had grade twelve and zero percent had a university degree. There was a significant difference ($t=3.24$, $df=136$, $p<0.05$) between graduates and non-graduates with respect to the highest level of education completed prior to enrolling at RRCC (Table 11).

It seemed logical to conclude that students entering the community college with grade eleven or twelve had a better chance of graduating than those with less education. Non-graduates tend to have lower academic backgrounds than graduates. For example, 39.7 percent of the non-graduates surveyed had a grade ten or less while only 8.9 percent of the graduates had grade ten or less.

b) AVERAGE GRADE IN LAST YEAR OF HIGH SCHOOL

The majority of the respondents (70.3%) had average grades that range from a C to B+ in the last year of high school. Twenty-six point one percent got an average grade of C, 23.9 percent got a C+ and 20.3 percent got B+. (Table 9). Forty-seven percent of the respondents got an average grade of C or less while only 9 percent got an average grade of B+ or A.

Graduates had higher average grades than non-graduates. For example, 26.7 percent had an average grade of B, 11.1 percent a B+, and 1.1 percent an A. Eight point three percent of non-graduates had an average grade of B, 2.1 percent a B+, and none had an A. The non-graduates also had the higher percentage of D and F grades (31.2%) compared to graduates (15.5%). There was a significant difference ($t=3.62$, $df=135$, $p<0.05$) between graduates and non-graduates with respect to the average grade attained during the last year of high school. These results supported several studies such as Astin and Panos (1969), Blanchfield (1971) and Astin (1972, 1978).

Qu.6. Was there a significant difference between graduates and non-graduates at the community college level with respect to a student's location of residence (farm, village, city) during the majority of

TABLE 9

Frequency and percentage of graduates and non-graduates according to level of education, and high school average in last grade.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Highest Level of Education (VAR023)	Grade 9	2	2.2	2	4.2	4	2.9
	Grade 10	6	6.7	16	33.3	22	15.9
	Grade 11	11	12.2	6	12.5	17	12.3
	Grade 12	48	53.3	19	39.6	67	48.6
	1st yr. University	6	6.7	0	0.0	6	4.3
	2nd yr. University	2	2.3	2	4.2	4	2.9
	Bachelor's Degree	8	8.9	0	0.0	8	5.3
	ABE/GED	7	7.9	3	6.3	10	7.2
	Other	0	0.0	0	0.0	0	0.0
			2	2.2	5	10.4	7
High School average grade (VAR025)	F = (0 - 59%)	12	13.3	10	20.8	22	15.9
	D = (60 - 69%)	22	24.4	14	29.2	36	26.1
	C = (70 - 74%)	19	21.1	14	29.2	33	23.9
	C+ = (75 - 79%)	24	26.7	4	8.3	28	20.3
	B = (80 - 84%)	10	11.1	1	2.1	11	8.3
	B+ = (85 - 89%)	1	1.1	0	0.0	1	0.7
	A = (90 - 100%)						

his/her school years before attending RRCC?

PLACE OF RESIDENCE

More than half the respondents (56.5%) lived in a city with a population of 50,000 or more inhabitants during the majority of their school years before attending RRCC (Table 10). Thirty percent lived in a small town (less than 10,000) or a large town (10,000 - 50,000). Sixty-one point eight percent of the graduates and 46.9 percent of the non-graduates lived in a city.

There was no significant difference between graduates and non-graduates with respect to location of residence during the majority of school years before attending RRCC. These results did not support the studies of Summerskill (1962), Cope (1968), and Astin (1975) who found that non-graduates came more frequently from rural, small town backgrounds.

In summary then, significant differences between graduates and non-graduates at the community college level were found for the following demographic variables: sex, educational level of sibling, highest level of education prior to enrolling at RRCC, and academic average during last year of high school (Table 11). When several variables (sex, age, financial situation, parental education, education of sibling, student's highest education level and academic high school average) were combined and the t-test applied, a significant difference ($t=5.31$, $df=137$, $p<0.05$) was found between graduates and non-graduates (Table 30).

TABLE 10
 Frequency and percentage of graduates and non-graduates according to years out of school
 and place of residence during majority of school years.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Years out of school (VAR024)	0 years	23	25.6	11	22.4	34	24.5
	1 - 2	27	30.0	16	32.7	43	30.9
	3 - 4	9	10.0	8	16.3	17	12.9
	5 - 6	7	7.8	4	8.2	11	7.9
	7 - 8	7	7.8	2	4.1	9	6.5
	8+	17	18.9	8	16.3	25	18.0
			10	11.2	7	14.3	17
Place of residence during majority of school years (VAR026)	Farm	17	19.1	8	16.3	25	18.1
	Village or Small Town (less than 10,000)	6	6.7	10	20.4	16	11.6
	Large Town (10,000 - 50,000)	55	61.8	23	46.9	78	56.5
	City (More than 50,000)	1	1.1	1	2.0	2	1.4
	Other						

TABLE 11
 Significant demographic variables according to
 mean, standard and deviation, T-value and degrees of freedom.

Variable	Sub-Group	Graduate		Non-Graduate		T-value	Degrees of freedom
		Mean	S.D.	Mean	S.D.		
Demographic Variables	Sex (VAR002)	1.4444	0.500	1.2653	0.446	2.10	137
	Brother/Sister Education (VAR020)	3.9756	0.929	3.333	1.066	3.53	125
	Student Pre-Community College education (VAR023)	4.3667	1.638	3.4167	1.648	3.24	136
	Academic Average (VAR025)	3.9444	1.344	3.1042	1.207	3.62	136

PERSONAL CHARACTERISTICS

Qu. 1. Was there a significant difference between graduates and non-graduates at the community college level with respect to appropriateness of course and enrollment restrictions?

a) APPROPRIATENESS OF PROGRAM

The majority of the respondents (55.1%) felt that their particular program was appropriate to a great extent to their needs or interests while forty point six percent felt that their program was appropriate to some extent (Table 12). Sixty-five percent of the graduates felt that their program was appropriate to a great extent while only 36.7 percent of the non-graduates felt this way. It appears that graduates were generally more satisfied with their programs than non-graduates.

The fact that 53.1 percent of the non-graduates stated that their particular program was only appropriate to some degree may indicate that some respondents may have withdrawn because of this lack of appropriateness to their needs and interests. This lack of appropriateness may have resulted in lack of interest in school work and boredom, which are ranked 1 and 3 among 12 possible reasons for students withdrawal.

There was a significant difference ($t = 2.49$, $df = 136$, $p < 0.05$) between graduates and non-graduates with respect to appropriateness of program.

b) ENROLLMENT RESTRICTIONS

There appeared to be no enrollment restrictions at the college. Eighty-six point five percent of the graduates and 81.6 percent of the non-graduates stated there were none. There was no significant difference

TABLE 12
 Frequency and percentage of graduates and non-graduates
 according to appropriateness of program and enrollment restrictions.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Appropriateness of program (VAR027)	No Extent	1	1.1	3	6.1	4	2.9
	Some Extent	30	33.7	26	53.1	56	40.6
	Great Extent	58	65.2	18	36.7	76	55.1
Enrollment restrictions (VAR028)	Yes	12	13.5	7	14.3	19	13.8
	No	77	86.5	40	81.6	117	84.8

between graduates and non-graduates with respect to enrollment restrictions.

Qu.2. Was there a significant difference between graduates and non-graduates at the community college level with respect to time management (time spent on assignment, study, class attendance and general organizational for school work)?

a) TIME SPENT ON ASSIGNMENT

One third (33.3%) of the respondents spent between 6-10 hours per week doing assignments (Table 13). Twenty percent spent between 11-15 hours per week and 10 percent spent between 16-19 hours per week. An almost equal percentage of graduates and non-graduates appeared to spend approximately the same number of hours per week doing assignments. For example, 20.2 percent of graduates and 18.4 percent of non-graduates spent between 11-15 hours per week, while 30.4 percent of graduates and 30.6 percent of non-graduates spent between 6-10 hours per week doing assignments. There was no significant difference between graduates and non-graduates with respect to time spent on assignment.

b) TIME SPENT ON STUDY

A similar pattern for time spent on study emerged as that of time spent on assignment (Table 13). An almost equal percentage of graduates and non-graduates spent approximately the same number of hours on study. For example, 38.9 percent of graduates spent between 4-7 hours per week on study while 40.8 percent of non-graduates did. There was no significant difference between graduates and non-graduates with respect to study time. These results did not support the studies of Shimron (1973), Good and Beckerman (1978), and King (1979) who found that the more able students spent more time with respect to study and assignment than the less able students.

TABLE 13
 Frequency and percentage of graduates and non-graduates according to time spent
 on assignment and study.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Time spent on assignment (VAR029)	0 - 5 Hrs./wk.	19	21.3	17	34.7	36	26.1
	6 - 10	31	34.8	15	30.6	46	33.3
	11 - 15	18	20.2	9	18.4	27	19.6
	16 - 19	10	11.2	3	6.1	13	9.4
	20 - 25	8	9.0	3	6.1	11	8.0
	25+	3	3.4	2	4.1	5	3.6
Time spent studying (VAR030)	0 - 3 Hrs./wk.	19	21.1	15	30.6	34	24.5
	4 - 7	35	38.9	20	40.8	55	39.6
	8 - 11	19	21.1	6	12.2	25	18.0
	12 - 15	7	7.8	5	10.2	12	8.6
	16 - 19	5	5.6	2	4.1	7	5.0
	19+	5	5.6	1	2.0	6	4.3

c) HOURS OF CLASSES MISSED

Attendance at classes did not seem to be a problem. Fifty-six percent of the respondents (Table 14) reported perfect attendance per week while 33.8 percent reported missing between 1 - 2 hours per week. There appeared to be no significant differences between graduates and non-graduates with respect to class attendance. For example, 54.4 percent of graduates missed zero hour per week while 59.2 percent of the non-graduates had the same attendance. Thirty-five point six percent of the graduates missed between 1 - 2 hours per week while 30.6 percent of the non-graduates did.

d) ORGANIZATION OF TIME FOR SCHOOL WORK

Eighty-five percent of the respondents stated that they had adequate or more than adequate time to do the minimum amount of school work required. Ninety-four percent of the graduates and 65 percent of the non-graduates stated the same. Thirty point six percent of the non-graduates and four point four percent of the graduates stated that they had inadequate time to do the minimum amount of school work (Table 15). Some of the non-graduates who had inadequate time could have been at part-time jobs (Table 14). There appeared to be no significant difference between graduates and non-graduates with respect to organization of time for school work.

Qu. 3. Was there a significant difference between graduates and non-graduates at the community college level with respect to a part-time job?

TABLE 14

Frequency and percentage of graduates and non-graduates according to hours of classes missed and hours spent on part-time job.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Hours of missed classes (VAR031)	0 Hrs/wk.	49	54.4	29	59.2	78	56.1
	1 - 2	32	35.6	15	30.6	47	33.8
	3 - 4	3	3.3	2	4.1	5	3.6
	5 - 6	3	3.3	1	2.0	4	2.9
	7 - 8	1	1.1	0	0.0	1	0.7
	9 - 10	0	0.0	1	2.0	1	0.7
	10+	2	2.2	1	2.0	3	2.2
Hours worked at part-time job (VAR032)	0 Hrs/wk.	49	54.4	29	59.2	78	56.1
	1 - 5	9	10.0	4	8.2	13	9.4
	6 - 10	5	5.6	2	4.1	7	5.0
	11 - 15	12	13.3	2	4.1	14	10.1
	16 - 20	8	8.9	7	14.3	15	10.8
	21 - 25	7	7.8	4	8.2	11	7.9
	26 - 30	0	0.0	1	2.0	1	0.7
30+	0	0.0	0	0.0	0	0.0	

a) PART-TIME JOB

Less than half of the respondents (44%) worked at a part-time job while attending RRCC. Nine percent of the respondents worked between 1 - 5 hours per week, 5 percent between 6 - 10 hours per week and 20 percent between 11 - 20 hours per week. There was no significant difference between graduates and non-graduates with respect to a part-time job. For example, 10 percent of graduates and 8.2 percent of non-graduates worked 1 - 5 hours per week; 7.8 percent of graduates and 8.2 percent of non-graduates worked 21 - 25 hours per week (Table 14). These results did not support the studies of Monroe (1972), and Astin (1975) who found that working part-time enhanced the possibility of graduating.

Qu. 4. Was there a significant difference between graduates and non-graduates with respect to participation in extra curricular activities?

a) EXTRACURRICULAR ACTIVITIES

The majority of the respondents (88.5%) did not take part in the student organization. Of those who took part, 75 percent were graduates. Fifty-eight percent of the respondent (Table 15) did not participate in any school sports. Fifty-five percent of graduates and only fourteen percent of non-graduates participated. Approximately 80 percent of the non-graduates and forty-six percent of graduates did not participate.

There was a significant difference between graduates and non-graduates ($t = 3.06$, $df = 137$, $p < 0.05$) at the community college level with respect to participation in extracurricular activities. This result

TABLE 15

Frequency and percentage of graduates and non-graduates according to time management for school work and extracurricular activities.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Time management for school work (VAR033)	Inadequate	4	4.4	15	30.6	19	13.7
	Adequate	60	66.7	25	51.0	85	61.2
	More than adequate	26	28.9	7	14.3	33	23.7
Member of student organization (VAR035)	Yes	12	13.3	4	8.2	16	11.5
	No	78	86.7	45	91.8	123	88.5
Participation in school sports (VAR036)	Yes	49	54.5	7	14.3	56	40.3
	No	41	45.6	39	79.6	80	57.6

supported several studies such as Snepp (1956), Howard (1972), Astin (1975), and Nelken and Gallo (1978) with respect to the difference between graduates and non-graduates when extracurricular activities are considered.

Qu.5. Was there a significant difference between graduates and non-graduates with respect to living arrangement while attending the community college?

LIVING ARRANGEMENT WHILE ATTENDING COLLEGE

Forty-two percent of the respondents (Table 16) stated that they lived with their parents/their parents and others, while attending RRCC, while twenty-four percent lived with a spouse/spouse and children. Fifteen percent lived alone. These results are not surprising since approximately 70 percent of the respondents were single and 20 percent were married (Table 4).

There appeared to be no significant differences between graduates and non-graduates with respect to living arrangement while attending college. For example, 15 percent of graduates and 14 percent of non-graduates lived alone; 15.6 percent of graduates and 14.3 percent of non-graduates lived with a spouse and children.

In summary then, only two variables, program appropriateness and participation in extra-curricular activities, showed significant differences between graduates and non-graduates at the community college level (Table 17).

TABLE 16

Frequency and percentage of graduates and non-graduates according to living situation at time of college attendance.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Living situation (VAR034)	Alone	14	15.6	7	14.3	21	15.1
	With parents	19	21.1	15	30.6	34	24.5
	With parents and others	20	22.2	4	8.2	24	17.3
	With wife/husband	10	11.1	3	6.1	13	9.4
	With wife/husband and children	14	15.6	7	14.3	21	15.1
	With roommate	6	6.7	5	10.2	11	7.9
	With roommates	1	1.1	4	8.2	5	3.6
	Other	6	6.7	4	8.2	10	7.2

TABLE 17
 Significant variables (personal characteristics) according to
 mean, standard deviation, T-value and degrees of freedom.

Variables	Sub-Group	Graduate		Non-Graduate		T-value	Degrees of Freedom
		Mean	S.D.	Mean	S.D.		
Personal Characteristics	Program Appropriateness (VAR027)	2.6404	0.506	2.3878	0.671	2.49	136
		1.3389	0.307	1.1735	0.298		
	Extracurricular Activities (VAR035, 036)					3.06	137

STUDENT PERCEPTIONS

This section contains sixty variables. Some of these variables are discussed singly such as perceived parental interest (VAR046), while others, such as informal student-teacher interaction (VAR070 to VAR075), and perception of classroom management (VAR086 to VAR097), are grouped.

Qu.1. Was there a significant difference in perception between graduates and non-graduates at the community college level with respect to reasons for attending RRCC?

REASONS FOR ATTENDING RRCC

An analysis of Table 18 will show that the two most often checked reasons were: "RRCC offered the course I needed", and "I wanted to be able to earn a higher wage." For example, 97.8 percent of the graduates and 87.5 percent of the non-graduates responded either "some extent" or "great extent" when asked to what extent (no extent, some extent, great extent) did availability of course influence their decisions to attend RRCC. When asked the same question with respect to earning a higher wage, 87.7 percent of the graduates and 87.8 percent of the non-graduates responded either to "some extent" or "great extent". Reasons such as "to please parents/others", "had friends at RRCC", and "sponsoring agency" had very little influence on students' reasons for attending RRCC. There was no significant difference between graduates and non-graduates with respect to reasons for attending RRCC.

TABLE 18

Frequency and percentage of graduates and non-graduates according to reasons for attending R.R.C.C. and appropriateness of course.

Variable	Sub-Group	Graduate						Non-Graduate					
		No Extent		Some Extent		Great Extent		No Extent		Some Extent		Great Extent	
		F	%	F	%	F	%	F	%	F	%	F	%
Reasons for attending R.R.C.C. (VAR037 to VAR045)	Availability of course	2	2.2	20	22.2	68	75.6	6	12.5	13	27.1	29	60.4
	Higher wage	11	12.2	30	33.3	49	54.4	6	12.2	14	28.6	29	59.2
	Not accepted at university	78	86.7	8	8.9	4	4.4	40	83.3	5	10.4	3	6.3
	Please parents	73	81.1	15	16.7	2	2.2	35	72.9	10	20.8	3	6.3
	Please others	79	87.8	11	12.2	0	0.0	39	81.3	5	10.4	4	8.3
	Friends at R.R.C.C.	80	88.9	9	10.0	1	1.1	42	87.5	6	12.5	0	0.0
	Sponsoring agency	61	68.5	15	16.9	13	14.6	32	68.1	8	17.0	7	14.9
	Other	47	71.2	5	7.6	14	21.2	25	67.6	5	13.5	7	18.9

Qu.2. Was there a significant difference in perception between graduates and non-graduates at the community college level with respect to parental encouragement?

PARENTIAL ENCOURAGEMENT

A careful examination of Table 19 will show that 52.8 percent of graduates and 51.1 percent of non-graduates stated that their parents gave them much encouragement with respect to completing their program of studies. Thirty four point eight percent of graduates and 35.6 percent of non-graduates stated that they got some encouragement. There was no significant difference between graduates and non-graduates. These results did not support the studies of Schreiber (1966) and Cross (1968) who found significant difference at the junior-senior high and four-year college level with respect to parental encouragement.

Qu.3. Was there a significant difference in perception between graduates and non-graduates at the community college level with respect to appropriateness of size of college?

SIZE OF RRCC CAMPUS

The majority of the respondents (72.5%) stated that RRCC was the right size, 8.7 percent felt that it too large while 18.8 percent felt that it was too small (Table 22). There was no significant difference between graduates and non-graduates with respect to size of college.

TABLE 19
 Frequency and percentage of graduates and non-graduates
 according to perceived parental interest.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Parental interest (VAR046)	No encouragement	11	12.4	7	15.2	18	13.3
	Some encouragement	31	34.8	17	37.0	48	35.6
	Much encouragement	47	52.8	22	47.8	69	51.1

Qu.4. Was there a significant difference in perception between graduates and non-graduates at the community college level with respect to counselling services?

COUNSELLING SERVICES - AWARENESS, VISITATIONS AND SATISFACTION

(a) AWARENESS

An analysis of Table 20 will show that the majority of respondents (77.5%) had some idea of the counselling services. Thirty five point five percent of the respondents was either well informed or had a fair idea while 22.5 percent knew nothing. A larger percentage of graduates (43.3%) than non-graduates (20.9%) was well informed or had a fair idea of the counselling services. There was a significant difference ($t=3.19$, $df=136$, $p<0.05$) between graduates and non-graduates with respect to the awareness of counselling services. These results supported the study of Dwight (1971) who found that the majority of Essex community college students were aware of the counselling services.

(b) COUNSELLOR VISITATIONS AND REASONS FOR SAME

Twenty six point six percent of the respondents sought the aid of the counsellors (Table 20). A slightly higher percentage of graduates (28.9) than non-graduates (22.4) sought counselling services. When reasons for counsellor visitations were ranked, career choice and academic-related matters were first and second. Financial was ranked last among six reasons. There was no significant difference between graduates and non-graduates with respect to counsellor visitations and reasons.

(c) SATISFACTION WITH COUNSELLING HELP

The majority of those who visited a counsellor was generally satisfied

TABLE 20

Frequency and percentage of graduates and non-graduates according to awareness of counselling services and counsellor visitations.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Awareness of counselling services (VAR047)	Knew nothing	15	16.7	16	33.3	31	22.5
	Knew very little	36	40.0	22	45.8	58	42.0
	Had fair idea	28	31.1	9	18.8	37	26.8
	Well informed	11	12.2	1	2.1	12	8.7
Counsellor visitation (VAR048)	Yes	26	28.9	11	22.4	37	26.6
	No	64	71.1	37	75.5	101	72.7
Reasons for counsellor visitation (VAR049 to VAR054)	Personal-social	8	8.9	3	6.1	11	7.9
	Financial	5	5.6	1	2.0	6	4.3
	Academic	9	10.0	4	8.2	13	9.4
	Career choice	13	14.4	2	4.2	15	10.0
	Entrance/withdrawal	3	3.3	4	8.2	7	5.0
	Other	2	2.2	4	8.2	6	4.3

TABLE 21

Frequency and percentage of graduates and non-graduates according to satisfaction with help for financial and personal problems.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Receiving help for financial problems (VAR055)	Yes	12	15.2	4	8.9	16	12.9
	No	11	13.9	12	26.7	23	18.5
	Did not seek help	56	70.9	29	64.4	85	68.5
Satisfaction with financial help (VAR056)	Yes	13	72.2	3	50.0	16	66.7
	No	5	27.8	1	16.7	6	25.0
Receiving help for personal problems (VAR057)	Yes	13	16.0	6	14.3	19	15.4
	No	3	3.7	4	9.5	7	5.7
	Did not seek help	65	80.2	32	76.2	97	78.9
Satisfaction with help for personal problems (VAR058)	Yes	12	92.3	5	62.5	17	81.0
	No	1	7.7	1	12.5	2	9.5

with the help they received. Eighty one percent of those who sought help for personal problems, and 66.7 percent of those who sought help for financial problems were satisfied. There was no significant difference between graduates and non-graduates with respect to counselling help.

Qu.5. Was there a significant difference in perception between graduates and non-graduates at the community level with respect to instructor characteristics (knowledge, presentation of subject matter and modelling)?

PERCEPTION OF INSTRUCTORS

Respondents were asked to rate their instructors in terms of how friendly, helpful, and how knowledgeable they were. They were also asked to rate them on the quality of their presentation of the subject matter, and to identify characteristics of at least one instructor whom they wanted to be like.

(a) FRIENDLY-UNFRIENDLY

The majority of the respondents (92.8%) felt that most of their instructors were friendly or very friendly (Table 22). This was also true for a majority of the graduates (96.7%) and non-graduates (85.7%)

(b) HELPFUL-NOT HELPFUL

A similar pattern of responses were found for (b) as that in (a) above.

(c) KNOWLEDGE OF SUBJECT MATTER

Ninety seven point one percent of respondents felt that most of

TABLE 22

Frequency and percentage of graduates and non-graduates according to appropriateness of size of college, instructor's friendliness, and helpfulness.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Appropriateness of size of college (VAR059)	Too small	16	17.8	10	20.8	26	18.8
	Right size	69	76.7	31	64.6	100	72.5
	Too large	5	5.6	7	14.6	12	8.7
Friendliness of instructor (VAR060)	Unfriendly	3	3.3	7	14.3	10	7.2
	Friendly	63	70.0	27	55.1	90	64.7
	Very friendly	24	26.7	15	30.6	39	28.1
Helpfulness of instructor (VAR061)	Not helpful	4	4.4	7	14.3	11	7.9
	Helpful	51	56.7	28	57.1	79	56.8
	Very helpful	35	38.9	14	28.6	49	35.3

TABLE 23

Frequency and percentage of graduates and non-graduates according to instructor's knowledge and presentation of subject matter.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Instructor's knowledge of subject matter (VAR062)	Not knowledgeable	2	2.2	2	4.1	4	2.9
	Knowledgeable	32	35.6	14	28.6	46	33.1
	Very knowledgeable	40	44.4	24	49.0	64	46.0
	Extremely knowledgeable	16	17.8	9	18.4	25	18.0
Instructor's presentation of subject matter (VAR063)	Poor	2	2.2	3	6.1	5	3.6
	Acceptable	15	16.7	7	14.3	22	15.8
	Good	36	40.0	18	36.7	54	38.8
	Very good	29	32.2	17	34.7	46	33.1
	Excellent	8	8.9	4	8.2	12	8.6

their instructors were knowledgeable, very knowledgeable or extremely knowledgeable about their subject matter. It was interesting to note that an almost equal percentage of graduates (62.2%) and non-graduates (64.0%) felt this way (Table 23).

(d) PRESENTATION OF SUBJECT MATTER

The majority of respondents (80.5%) felt that the presentation of the subject matter by most of their instructors were good, very good or excellent (Table 23). This was also true for 81.1 percent of graduates and 76.6 percent of non-graduates.

(e) INSTRUCTOR AS MODEL AND CHARACTERISTICS ADMIRRED

The majority of the respondents (71.7%) stated "yes" when asked if there was at least one instructor they wanted to be like. Eighty one percent of the graduates and 55 percent of the non-graduates answered in the affirmative in response to the same question.

The instructors' characteristics which were mostly admired, when ranked from the highest to the lowest, were: his expertise in the subject matter, personal qualities, appearance of satisfaction with his job, the high esteem in which he was held, and a reputation for his knowledge and skills. Expertise was ranked highest by both graduates and non-graduates, while personal qualities were ranked second by both groups. Reputation was ranked lowest by graduates, while esteem was ranked lowest by non-graduates.

It seemed that an overwhelming majority of respondents were satisfied with their instructors in terms of their friendliness, helpfulness, knowledge, and presentation of their subject matter. There was no significant differences between graduates and non-graduates at the community

TABLE 24
 Frequency and percentage of graduates and non-graduates
 according to their perception of the instructor as a model.

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Instructor as a model (VAR064)	No	17	19.1	21	42.9	38	27.5
	Yes	72	80.9	27	55.1	99	71.7
Instructor characteristic as a model (VAR065 to VAR069)	Expertise	44	48.9	14	28.6	58	41.7
	Esteem	37	41.1	8	16.3	45	32.4
	Reputation	32	35.6	10	20.4	42	30.2
	Admirable qualities	43	47.8	10	20.9	53	38.1
	Job satisfaction	32	36.4	14	28.6	46	33.6

college level with respect to the above-mentioned variables in (a) to (d). There were significant differences between graduates and non-graduates with respect to instructor characteristics as a model (Table 29).

Qu.6. Was there a significant difference in perception between graduates and non-graduates at the community college with respect to informal student-teacher interaction?

INFORMAL STUDENT-TEACHER INTERACTION

An analysis of Table 25 will show that a larger percentage of graduates met informally more frequently with their instructors than their non-graduate counterparts. This was true for all six variables listed. For example, 20 percent of graduates met more than seven times with their instructors on an informal basis to get basic information and advice about their academic program, while zero percent of non-graduates did. Thirty three percent of graduates met at least four times with instructors to discuss matters related to their future career. This was true for zero percent of non-graduates. When all six variables were combined and the t-test applied, there was a significant difference ($t=7.10$, $df=137$, $p<0.05$) between graduates and non-graduates with respect to informal student teacher interaction (Table 29).

These results supported the studies of Feldman and Newcombe (1969), Spady (1971), Tinto (1975), and Pascarella and Terenzini (1977). These studies show that students' non-classroom interaction with instructors increase their chances of graduating.

TABLE 25

Frequency and percentage of graduates and non-graduates according to their informal interaction with instructors.

Variable	Sub-Group	Graduate Times Met												Non-Graduate Times Met											
		0		1 - 3		4 - 6		7 - 9		10+		0		1 - 3		4 - 6		7 - 9		10+					
		F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%				
Student instructor informal interaction (VAR070 to VAR075)	Guidance	17	19.1	10	47.2	10	11.2	8	9.0	12	13.5	26	54.2	18	37.5	3	6.3	0	0	1	2.1	0	0		
	Planning for future career	28	31.1	32	35.6	12	13.3	9	10.0	9	10.0	36	75.0	9	18.8	3	6.3	0	0	0	0	0	0		
	Resolution of personal problem	57	64.8	15	17.0	4	4.5	7	8.0	5	5.7	44	89.8	5	10.2	0	0	0	0	0	0	0	0		
	Discussion of subject matter	15	16.9	37	41.6	17	19.1	6	6.7	14	15.7	35	72.2	10	20.8	2	4.2	1	2.1	0	0	0	0		
	Informal socializing	25	28.1	30	33.7	14	15.7	9	10.1	11	12.4	38	79.2	9	18.8	1	2.1	0	0	0	0	0	0		
	Campus issue	60	67.4	14	15.7	8	9.0	1	1.1	6	6.7	44	91.7	3	6.3	1	2.1	0	0	0	0	0	0		

Qu.7. Was there a significant difference in perception between graduates and non-graduates with respect to the college administration?

STUDENTS PERCEPTION OF COLLEGE ADMINISTRATION

Respondents were given six statements and were asked to state whether they agreed or disagreed with each of the statements which mainly dealt with administration-related functions. For example, when given the statement, "At R.R.C.C., the students are involved in decisions that affect them," 65.6 percent of graduates and 73.9 percent of non-graduates stated that they agreed with the statement (Table 26). Secondly, when given the statement, "At R.R.C.C. there are too many stringent rules," 84.4 percent of graduates and 79.2 percent of non-graduates disagreed with the statement. Sixty eight point five percent of graduates and 64.4 percent of non-graduates disagreed with the statement that the administration is always making all the rules.

It seemed quite obvious that the majority of respondents felt that they had a voice in decisions that affected them in the college, and that the administration did not make all the decisions for them. They also felt that there were not too many stringent rules and regulations, and that they had choices in the courses they took.

When the t-test was applied to each of the six variables (Table 26), five of the six showed no significant difference between graduates and non-graduates. However, when the six variables were grouped and the t-test applied, there was a significant difference ($t=3.06$, $df=137$, $p<0.05$) between graduates and non-graduates with respect to the perception of the administration (Table 29).

TABLE 26
 Frequency and percentage of graduates and non-graduates
 according to students perceptions of the college environment.

Variable	Sub-Group	Graduate				Non-Graduate			
		Agree		Disagree		Agree		Disagree	
		F	%	F	%	F	%	F	%
Perception of college environment (VAR076 to VAR081)	Students involve- ment in decision making	59	65.6	31	34.4	34	73.9	12	26.1
	Excessive restriction	14	15.6	76	84.4	10	20.8	38	79.2
	Instructor inflexibility	25	27.8	65	72.2	18	37.5	30	62.5
	Administrative control	28	31.5	61	68.5	16	35.6	29	64.4
	Core requirements completion	77	86.5	12	13.5	37	78.7	10	21.3
	Student preference for courses	64	71.1	26	28.9	18	39.1	28	60.9

Qu.8. Was there a significant difference in perception between graduates and non-graduates at the community college level with respect to confidence level and self-concept.

(a) CONFIDENCE LEVEL

An analysis of table 27 will show that 80.4 percent of the respondents felt confident or very confident when doing school work. Graduates tend to feel confident more than non-graduates. For example, 64.4 of graduates felt confident and 26.7 percent felt very confident when doing school work. This compared to 61.0 percent and 19.4 percent for non-graduates. There was a significant difference between graduates and non-graduates ($t=4.73$, $df=137$, $p<0.05$) with respect of their perception of their confidence when doing school-related work.

(b) SELF CONCEPT

Respondents were requested to answer "yes" or "no" to three questions pertaining to the perceptions they had of themselves. Eighty percent of the respondents answered "yes" when asked if they were successful persons. Ninety point eight percent of graduates and 63.3 percent of non-graduates also answered "yes" to the same question (table 27). Eighty six point six percent of respondents (93.1 percent graduates, and 75.0 percent non-graduates) answered "yes" when asked if they perceived themselves as being successful. Ninety six point six percent of graduates and 85.4 percent of non-graduates perceived their course/trade as making a useful contribution to society.

When the three variables were combined and the t-test applied,

TABLE 27
 Frequency and percentage of graduates and non-graduates
 according to confidence in doing school work and self-perception

Variable	Sub-Group	Graduate		Non-Graduate		Total Sample		
		Freq.	Percent	Freq.	Percent	Freq.	Percent	
Confidence in doing school work (VAR082)	Not confident	8	8.9	18	36.7	26	18.7	
	Confident	58	64.4	28	51.1	86	61.0	
	Very confident	24	26.7	3	6.1	27	19.4	
Self-perception (VAR083 to VAR085)	Success oriented	No	8	9.2	18	36.7	26	19.1
		Yes	79	90.8	31	63.3	110	80.9
	Successful self concept	No	6	6.9	12	25.0	18	13.3
		Yes	81	93.1	36	75.0	117	86.7
	Course/ trade contributing to society	No	2	2.2	7	14.6	9	6.6
		Yes	86	96.6	41	85.4	127	92.7

there was a significant difference ($t=4.35$, $df=137$, $p<0.05$) between graduates and non-graduates at the community college level with respect to self perception. These results supported the studies of Borislow (1962), Chabazi (1971), and Pulliams (1976) who found that non-graduates tended to show a lower self concept than graduates at the four-year college and community college level.

Qu.9. Was there a significant difference in perception between graduates and non-graduates at the community college level with respect to classroom management?

CLASSROOM MANAGEMENT

Respondents were asked to respond to what extent (SA, D, N, A, SD) they agreed or disagreed to twelve statements pertaining to their perception of classroom management while they attended RRCC.

(a) INDIVIDUALIZING BASED ON ABILITY

Fifty eight point three percent of the graduates stated that they agreed or strongly agreed with the statement that most instructors made allowances for the differing abilities of students. Only 27.7 percent of non-graduates agreed or strongly agreed with the statement (Table 28). There was a significant difference ($t=3.86$, $df=134$, $p<0.05$) between graduates and non-graduates at the community college level with respect to instructor making allowances for the differing abilities of students

(b) ALLOWANCE FOR GROUP ACTIVITIES

Seventy point eight percent of the graduates (Table 28) indicated that they agreed or strongly agreed with the statement that there

was some allowance for group activities. Forty point eight percent of non-graduates agreed or strongly agreed with the statement. There was a significant difference between graduate and non graduates ($t=4.88$, $df=136$, $p<0.05$) with respect to group activities.

(c) INSTRUCTOR AND STUDENT'S PERSONAL PROBLEMS

Forty five point four percent of the graduates (Table 28) agreed or strongly agreed with the statement that most instructors listened to students' personal problems. Thirty point six percent of non-graduates agreed or strongly agreed to the statement. There was a significant difference ($t=4.22$, $df=135$, $p<0.05$) between graduates and non-graduates with respect to instructor listening to students' personal questions.

(d) APPROPRIATENESS OF LEARNING MATERIALS

Sixty six percent of graduates (Table 28) agreed or strongly agreed with the statement that most learning materials were geared to the level of the learner's ability. Forty eight point nine percent of non-graduates agreed or strongly agreed with the statement. There was a significant difference ($t=3.73$, $df=135$, $p<0.05$) between graduates and non-graduates with respect to appropriateness of learning materials at the community college level.

(e) FLEXIBLE TIME TABLING AND SCHEDULING OF CLASSES

Sixty point seven percent of graduates (Table 28) agreed or strongly agreed that there were flexible timetabling and scheduling of classes. Only 27.3 percent of the non-graduates agreed or strongly agreed to this statement. There was a significant difference ($t=3.93$, $df=135$, $p<0.05$) between graduates and non-graduates with

TABLE 28

Frequency and percentage of graduates and non-graduates according to their perceptions of classroom management.

Variable	Sub-Group	Graduate						Non-Graduate								
		SD*	D	N	A	SA	SD	D	N	A	SA					
Classroom Management (VAR086 to VAR097)	Individualizing based on ability	7	18	12	43	9	11	13	23.4	6	13	10	27.7	13	27.7	0
	Group activities	4	3	19	58	5	14	21.3	28.6	5	5	10	10.2	19	38.8	1
	Instructor listening to personal problems	1	14	33	34	6	13	37.5	38.6	9	9	12	18.4	15	30.6	0
	Appropriateness of level of learning materials	1	10	19	51	8	9	21.3	57.3	10	10	7	20.8	19	39.6	6.3
	Time tabling and scheduling of classes	10	12	13	45	9	13	14.6	50.6	10	10	12	20.8	13	27.1	0
	Helpful assignments	2.2	2.2	2	66	17	8	2.2	74.2	16.7	6	3	12.5	28	58.3	6.3
		2.2	2.2	2	66	17	2.2	74.2	16.7	6	3	12.5	28	58.3	6.3	

(cont'd on next page)

*SD = strongly disagree; D = disagree; N = neither; A = agree; SA = strongly agree

respect to flexible time-tabling and scheduling of classes.

(f) HELPFUL ASSIGNMENTS

Ninety three point three percent (Table 28) of graduates agreed or strongly agreed that the assignments were generally related and contributed to the understanding of the subject matter. Sixty four point six percent of non-graduates agreed or strongly agreed to this statement. There was a significant difference ($t=4.78$, $df=135$, $p<0.05$) between graduates and non-graduates with respect to relatedness of assignments to the subject matter.

(g) FAIR TREATMENT BY INSTRUCTORS

Eighty six point five percent of the graduates (Table 28) agreed or strongly agreed that most instructors treated them fairly. Fifty nine point two percent of non-graduates agreed or strongly agreed to the statement. There was a significant difference ($t=4.61$, $df=136$, $p<0.05$) between graduates and non-graduates with respect to fair treatment by most instructors.

(h) INSTRUCTORS' INTEREST IN STUDENTS

Seventy nine point eight percent of graduates agreed or strongly agreed that most instructors were generally interested in what a student had to say. Fifty three point one percent of non-graduates agreed or strongly agreed with this statement. There was a significant difference ($t=5.08$, $df=136$, $p<0.05$) between graduates and non-graduates with respect to instructors' interest in students.

(i) SUCCESS-ORIENTED TEACHER

Seventy nine point seven percent of the graduates (Table 28) agreed or strongly agreed that most instructors taught their courses in

such a way that students were able to succeed. Not surprisingly, only 46.9 percent of the non-graduates agreed or strongly agreed with this statement. There was a significant difference ($t=4.97$, $df=136$, $p<0.05$) between graduates and non-graduates with respect to success-oriented teacher.

(j) INSTRUCTOR BELIEF IN STUDENTS' CAPABILITY

Seventy two percent of graduates (Table 28) agreed or strongly agreed that most instructors made them feel that they were capable of coping with the level of work. Fifty five point one percent of the non-graduates agreed or strongly agreed with the statement. There was a significant difference ($t=4.92$, $df=136$, $p<0.05$) between graduates and non-graduates with respect to instructors' belief in the students' capability.

(k) RETURN OF ASSIGNMENTS

Sixty six point three percent of the graduates (Table 28) agreed or strongly agreed that most instructors returned their assignments/tests early enough for them to be valuable to the students. Forty point eight percent of the non-graduates agreed or strongly agreed with the statement. There was a significant difference ($t=5.20$, $df=136$, $p<0.05$) between graduates and non-graduates with respect to return of assignments.

(l) USEFUL COMMENTS ON RETURNED PAPERS

Sixty four point eight percent of the graduates (Table 28) agreed or strongly agreed that most instructors made useful comments on their papers. Only 22.4 percent of non-graduates agreed or strongly agreed with the statement. There was a significant difference

TABLE 29
 Significant variables (student perceptions) according to
 mean, standard deviation, T-value and degrees of freedom.

Variable	Sub-Group	Graduate		Non-Graduate		T-Value	Degrees of Freedom
		Mean	S.D.	Mean	S.D.		
Student Perception	Counselling awareness (VAR047)	2.3889	0.908	1.8958	0.778	3.19	136
	Career choice (VAR052)	1.1444	0.354	1.0417	0.202	1.86	136
	Instructor as a model (VAR064)	1.8090	0.395	1.5918	0.537	2.71	136
	Instructor as expert (VAR065)	1.4889	0.503	1.2857	0.456	2.35	137
	Instructor - high exteem (VAR066)	1.4111	0.495	1.1633	0.373	3.06	137
	Instructor - knowledge (VAR067)	1.3556	0.481	1.2041	0.407	1.87	137
	Personal qualities (VAR068)	1.4778	0.502	1.2041	0.407	3.27	137

(con't. on next page)

TABLE 29
 Significant variables (student perceptions) according to
 mean, standard deviation, T-value and degrees of freedom.

Variables	Sub-Group	Graduate		Non-Graduate		T-Value	Degrees of Freedom
		Mean	S.D.	Mean	S.D.		
Student Perceptions	Informal student- -teacher interaction (VAR070, 071, 072, 073, 074, 075)	2.1889	0.860	1.2585	0.428	7.10	137
	Administration (VAR076, 077, 078, 079, 080, 081)	1.7407	0.235	1.5850	0.365	3.06	137
	Confidence in doing school work (VAR082)	2.1778	0.572	1.6939	0.585	4.73	137
	Successful person (VAR083, 084, 085)	1.9667	0.300	1.7143	0.372	4.35	137
	Classroom management (VAR086, 087, 088, 089, 090, 091, 092, 093, 094, 095, 096, 097)	3.6343	0.668	2.7296	0.926	6.63	137

TABLE 30

Significant variables of the three main divisions according to mean, standard deviation, T-value and degrees of freedom.

Variable	Sub-Group	Graduate		Non-Graduate		T-value	Degrees Of Freedom
		Mean	S.D.	Mean	S.D.		
Demographic	(VAR002 & 003 VAR017 & 018 & 019 & 020 & 023 & 025) (N = 6)	3.2370	0.644	2.6701	0.514	5.31 *	137
Personal Characteristics	(VAR029 & 030 & 031 & 032 & 033 & 035 & 036 (N = 6)	2.0159	0.511	1.8513	0.497	1.83 **	137
Student Perceptions	(VAR046 to VAR097) (N = 37)	2.4763	0.281	2.0700	0.403	6.95 *	137

* significant at $p < 0.05$

** not significant

($t=7.65$, $df=135$, $p<0.05$) between graduates and non-graduates with respect to useful comments made on returned papers. It should be noted that there was a significant difference between graduates and non-graduates on all twelve variables when these variables were combined and the t-test applied, there was a significant difference ($t=6.63$, $df=137$, $p<0.05$) between graduates and non-graduates (Table 29).

In summary then, the following variables or groups of variables showed significant differences between graduates and non-graduates with respect to students' perceptions: counselling awareness (VAR047), instructor as a model (VAR068), informal student-teacher interaction (VAR070 to 075), administration (VAR076 to VAR081), confidence in doing school work (VAR082), self concept (VAR083 to VAR085) and classroom management (VAR086 to VAR097).

REASONS FOR WITHDRAWING/NOT GRADUATING

The reasons for withdrawing were ranked according to frequency and percentage of responses. A careful examination of Table 31 on the next page will show that "lack of interest in school" ranked highest (40.8%), "test failure" second (32.7%), "boredom with courses", third (30.6%), "insufficient funds", fourth, and three reasons ranked fifth - "dislike of teachers" (20.4%), "dislike of course" (20.4%), and domestic problems (20.4%). The rest of the reasons and their respective percentages can be found in Table 31.

It appeared from these results that school related matters (lack of interest, test failures, boredom with courses, dislike of teachers, and dislike of courses) were the major reasons for students' withdrawal.

TABLE 31
 Rank, frequency and percentage of non-graduates
 according to reasons given for withdrawing/not graduating.

Reasons	Frequency	Percent	Reasons	Frequency	Percent
1. Lack of interest in school	20	40.8	8. Other	9	18.4
2. Test failure	16	32.7	9. Dislike teaching method	8	16.3
3. Boredom with courses	15	30.6	10. Inability to cope	7	14.3
4. Insufficient funds	11	22.4	11. Found a job	6	12.2
5. Dislike of teachers	10	20.4	12. Loneliness	3	6.1
5. Dislike of courses	10	20.4	13. Marriage	2	4.1
5. Domestic problems	10	20.4	13. Pregnancy	2	4.1

These results do not support the studies of Medsker (1960) and Stine (1976) in terms of specific ranking of the reasons, but some of these reasons, for example, "insufficient funds" do appear in this present study and on Stine's and Medsker's. The results of this study seemed to support the study conducted by the Research Branch, Manitoba Department of Labour and Manpower (1980).

FUTURE EDUCATIONAL PLANS OF NON-GRADUATES

There appeared to be some encouraging signs that the non-graduates will eventually return to continue their education. For example, 71.1 percent (Table 32) stated that they plan to return to RRCC to continue their studies, while 20.0% stated that they will return to another school. That meant, approximately all of the non-graduates would be returning to school to resume their studies.

TABLE 32
 Frequency and percentage of non-graduates
 according to future educational plans.

Variable	Sub-Group	Non-Graduate	
		Frequency	Percentage
Continuing education plans (VAR112)	Returning to R. R. C. C.	32	71.1
	Attend another school	9	20.0
	Not returning to any school	4	8.9

COMMENTS FROM GRADUATES AND NON-GRADUATES

The questionnaire provided space on the last page for personal comments which a small percentage (20%) of the respondents used. The purpose of that page was to allow respondents to express their feelings in a less structured format. The selections below are representative of many comments/concerns and are excerpted precisely as written by individual respondents. An attempt has been made to categorize these comments under several headings.

(A) INSTRUCTORS, TEACHING QUALITY AND COURSES

The most frequently repeated theme was related to instructors, teaching quality and courses. Non-graduates tended to write negative comments while graduates tended to write more positively.

INSTRUCTORS

1. Graduate - Business and Applied Arts

"During my attendance at the college, I was fairly pleased with the way the instructors presented the material. I was also quite impressed at how well most of the instructors knew their material."

2. Graduate - Industrial Technology

"Almost all instructors would help after hours if asked by students."

3. Graduate - Industrial Technology

"The instructors who taught me last year were all excellent people."

4. Graduate - Business and Applied Arts

"In general, I am very satisfied with the quality of education I received at R.R.C.C. The instructors helped me to develop skills as well as to expand my personal knowledge."

5. Non-Graduate - Industrial Technology

"The courses bored me because of the repetition and the seemingly slow progress that the instructors were making. Because of that situation I did not pay attention and did poorly on my test."

6. Non-Graduate - Business and Applied Arts

"The instructors (for the most part) are arrogant, opinionated artistes who have a knack for thinking that they are great."

COURSES

With respect to course work, it appeared that both graduate and non-graduate felt that the courses were too long and too demanding.

7. Non-graduate - Business and Applied Art

"I have heard from many people that the amount of time that must be spent in the course that I took (Advertising Art) is at such a level that your spare time is non-existent. I experienced just a touch of this before I gave up."

8. Non-graduate - Industrial Technology

"The work in science is too difficult for me and only want to be a simple mechanic not a scientist."

10. Graduate - Industrial Technology

"Where Red River is valuable is in the strong job-orientation of its courses. It tries to prepare people for an increasingly competitive job market."

11. Graduate - Business and Applied Arts

"The course work load was a bit demanding. It seems like you are working all the time with no time for relaxing."

12. Graduate - Business and Applied Arts

"Three months is not enough time to learn Production Management or Securities Investment. We only scratched the surface."

(B) Experiences at R.R.C.C.

The comments written with respect to experiences at the college indicate that both graduate and non-graduate had pleasant experiences.

1. Non-Graduate - Business and Applied Arts

"Attending R.R.C.C. was a very positive experience I will always remember. I regret due to family problems and ill health I haven't been able to make much use of the education offered there."

2. Graduate - Industrial Technology

"I found that my time spent at R.R.C.C. was wonderful learning experience after being out of school for a number of years. I gathered a great deal of technical knowledge in my chosen field and all in all had a most satisfying year....I may also add, for your benefit, that I went from being a very poor, uninterested student in high school to being one of the top graduates at

R.R.C.C. in my chosen field.

3. Graduate - Business and Applied Arts

"My course at R.R.C.C. was a terrific experience, although, achievement was not easy."

4. Non-Graduate - Business and Applied Arts

"I enjoyed my course very much although I had to quit before graduating."

5. Graduate - Business and Applied Arts

"I graduated from Creative Communications in 1981, and have worked in a course related job ever since....I have recommended R.R.C.C. to my friends."

6. Graduate - Nursing

"Great memories."

7. Non-Graduate - Business Administration

"I found that R.R.C.C. was too large for me. It was unlike my highschool where I knew most of the students. The bigness and isolation was too much for me to handle."

(C) SUPPORT SERVICES

Many respondents (mostly graduates) appeared to be unhappy with the state of the library - when they attended R.R.C.C.

1. Non-Graduate - Business and Applied Arts

"I also objected to the lack of study space and the atmosphere of a hang-out to the halls and lunchroom. The hallways of D, E and F buildings and lunchrooms were filled with radios, the library was like a playroom."

3. Graduate - Business and Applied Arts

"The library had adequate space but it was too noisy for me."

4. Graduate - Business and Applied Arts

"Our two classrooms were very crowded, but the library was the worst."

5. Graduate - Industrial Technology

"The library had excellent materials. I only wished that students would be more quiet in there."

6. Non-Graduate - Business and Applied Arts

"The atmosphere on campus seemed so impersonal. I wasn't aware of many services or how to go about getting them."

7. Graduate - Nursing

"I think there is way too many students at the college relative to the size and the number of facilities."

(D) CIRCUMSTANCES, FINANCE AND UNCERTAIN GOALS

Some students found themselves the victims of circumstances, over which they had little or no control.

1. Non-Graduate - Business and Applied Arts

"My parents were going through divorce proceedings while I was attending R.R.C.C. I was very upset and confused."

2. Non-Graduate - Nursing

"I got pregnant and my boyfriend took off on me. I had to drop out."

3. Non-Graduate - Industrial Technology

"My wife left me during my second term. I just could not go on."

4. Non-Graduate - Business and Applied Arts

"I was very tired and weary all the time from having to work to support my college costs. I was constantly disheartened that I did not have the time to study to get better grades and to learn more. There should be student loans."

5. Non-Graduate - Industrial Technology

"I was suppose to receive financial aid from Manpower but 1 month after I started school they informed me that I would not be receiving any money. I was very disgusted and fed up."

6. Non-Graduate - Industrial Technology

"The main reason for leaving R.R.C.C. was I wasn't sure what I wanted to do in the way of a career and perhaps should have waited to enter K.C.C. from high school."

(D) IDENTITY SEEKING

Erickson and others (eg. Chickering, 1968) have perceptively reviewed the college years as one in which students are involved in the process of identity formation. Students vary greatly, however, in the extent to which this identity-forming process is critical and conscious concern and thus, while there is evidence that identity crises usually lead students to become dropouts and sometimes to withdraw from post-secondary education, the extent to which this is a dropout problem is difficult to assess.

1. Non-Graduate - Business and Applied Arts

"I went to R.R.C.C. because I wanted to grow intellectually, and emotionally so that I would be able to face the world out there. I was greatly disappointed in both."

2. Non-Graduate - Nursing

"I was protected all my life because I lived with my parents. When I attended R.R.C.C. I had to live alone and I could not cope with this new situation. I did not know who I was and what I was suppose to do."

CHAPTER 5

RECOMMENDATIONS AND IMPLICATIONS FOR FURTHER RESEARCH

In this chapter, some recommendations are suggested which are directly related to the results of the study, especially the significant differences that were found. These recommendations are noted in a general way and may have implications for programming at the community college, and any institution with students of similar characteristics and educational program offerings.

1. The results of this study suggest that there is increased probability of an applicant completing successfully their chosen course of studies if he/she had successfully completed at least grade eleven. This underscores the importance of a sound academic education as a basis for higher technical and vocational education.
2. In accordance with all the research studies, it seems that students with high academic averages, at least B, will more likely succeed than students with low academic averages. This also suggests that heavy emphasis should be placed on high school grades. It would also be helpful for community college programmers to have an opportunity to contribute to curriculum development at the high school level. Such a practice would ensure standardization and relevance of the high school curriculum.
3. Since program appropriateness was found to be significant for graduates, community college administration should maximize opportunities for high school and other interested applicants to be counselled

professionally, so that they would enter into programs which are appropriate in terms of interest, abilities, personal-social needs, and work opportunities. Such counselling will obviate the possibility of applicants entering programs on the basis of childhood fantasy, peer modelling or parental pressures. There are also many situations in which applicants are forced into programs simply because seats are available. This practice could prove to be rather costly and very time-consuming for all concerned.

4. Because graduates seem to become involved to a greater extent in extra-curricular activities more than non-graduates, there seems to be some sort of positive influence operating which could be contributing to student satisfaction, enjoyment and eventual academic success. It would probably be worthwhile for the college administration, via the student body, to inform the entering students of the wide spectrum of extra-curricular activities, and set up mechanisms whereby these students might be encouraged to participate. Involvement in such activities would probably result in college and student identification, and greater possibilities for assistance of various types to accrue to the student.
5. Deliberate attempts should be made to assist students to become more aware of the opportunities available for counselling, and also, information pertaining to careers be disseminated abundantly. Opportunities for examining career choices and alternatives should be easily available.
6. Since this study suggests that the personal qualities, and knowledge of the instructor were perceived by graduates as being impor-

tant, then it is imperative that personnel consider these in the selection process. It seems necessary for instructors of community college students to be aware that graduates more than non-graduates perceive them as models, as experts, and hold them in high esteem. If instructors can make efforts to appreciate these characteristics, they might be able to motivate their students much more easily and indirectly.

7. Community college programmers should initiate activities that would make it possible for a greater degree of informal student-teacher interaction. Activities such as pub-night, sporting activities and their associated post-game gathering, could prove to have beneficial and positive impact on academic performance. On the same vein, faculty should make strong efforts at getting uninvolved students to participate in these non-academic activities which do seem to have a desirable effect on them. Such involvement will probably result in these students seeking more assistance than they would under normal circumstances. Informal contacts with students seem to have positive influences on student performances.
8. With respect to student perceptions of college administration, the results of this study seem to suggest that students should have a greater opportunity to voice their concerns pertaining to college regulations and procedures. This practice should result in students being able to understand the rationale for college procedures and regulations. Instructors and college administrators would be helpful if they would listen very patiently and employ some needed empathic understanding. It also suggests that regulations and

procedures which seem outdated and non-functional to students be modified to become more functional in terms of the needs of all college participants.

9. Since confidence in doing school work separated graduates from non-graduates, it stands to reason that the curriculum be so designed that students, who have a history of past failures or those who are borderline cases and appear to be potential failures, be provided with opportunities to move from the simplest levels of academic skills to the most difficult and complex levels. Maximizing opportunities for success should result in seeing themselves as successful persons, and this will obviously result in self confidence.

10. Since classroom management variables were significantly favourable for graduates, it appears that there were distinct perceptions between graduates. It is interesting to note that significant differences emerged in all eleven component variables (VAR086 to VAR097), subsumed under the general category of classroom management. This would be interpreted to mean that either the graduates were dealt with in a positive way on all eleven sub-dimensions (e.g., individualizing based on ability) or that instructors did in fact, treat both graduates and non-graduates in the manner in which the sub-dimensions were perceived.

It seems reasonable to suggest that in-service training sessions could be planned and implemented to train instructors to be able to operationalize the techniques suggested under classroom management. It could very well be that the graduates, although

they perceived these practices to be operating, could have very well been successful without these techniques being applied to them. Therefore, it seems that more time and attention be paid by instructors in applying these techniques with potential drop-outs and non-graduates. This may produce substantially better results than normally. The results of this part of the study should be brought to the attention of the instructors and administration and efforts made to instill higher levels of functioning on these sub-divisions.

11. An examination of the reasons given for withdrawing/not graduating reveals that school-related problems, (as many as five in a possible total of thirteen) were identified as being the highest ranking causes (Table 31). It seems necessary for educators, in general, and community college faculty and administrators in specific, to search out ways and means for remedying these problems. In-service teaching education courses addressing themselves to these problems, either wholly or in part, might help to eliminate or minimize withdrawals.

The problem of insufficiency of funds has been a chronic problem, and students must be helped to secure funds as early as possible so as to permit budgetting adequately. An emergency fund might be helpful in staying off temporary financial setbacks. Some of the other problems such as: loneliness, marriage, and pregnancy, could be dealt with by professional counselling services.

IMPLICATIONS FOR FURTHER RESEARCH:

1. A further study might focus on students with similar characteristics in the two other community colleges in Manitoba. This will provide a larger sample and would enable greater generalizability.
2. Further research might focus on the non-graduates in order to gather more "true" information pertaining to reasons for withdrawing. Both the questionnaire and interview method could be used.
3. It would be interesting to investigate the instructors' perceptions of students withdrawing/not graduating and compare these with their perceptions of the graduates.
4. Administration permitting, a study designed to investigate the realities of the classroom on the dimensions cited under the category of classroom management, could provide useful information upon which in-service and professional development of faculty could be premised.

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APPENDICES



RED RIVER COMMUNITY COLLEGE

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Winnipeg, Manitoba R3H 0J9
Telephone 204/632-2311

Aaron H. Koodoo BSc., B.Ed., CAE.,
Department of Industrial Technology

APPENDIX A

March 10, 1982

Dear

Your name has been chosen as part of a group study from a list of graduates and non-graduates who attended Red River Community College sometime between 1979 and 1981. While this study is being conducted as part of my Masters' Thesis in the Faculty of Education, the Director of Counselling Services and the Director of the Tutorial Centre at Red River Community College are also very interested in the results. They have been instrumental in the development of some of the questions on the questionnaire.

The purpose of this study is to identify differences between graduates and non-graduates. Current information on these two groups at the community college level is virtually non-existent. You are the only source of information, and as a result, I wish to request that you complete the attached questionnaire. It takes 10-15 minutes to complete. Your participation is not simply important, but it is vital to the success of this study.

All information that you provide in the questionnaire will be kept strictly confidential. Your name is not needed on the questionnaire, and it will not be used in any way, except to mail this material to you.

I would be most grateful if you would return the completed questionnaire in the enclosed postage-paid, self-addressed envelope before March 29, 1982. I will be most pleased to send you a summary of the survey results.

Thank you for your valuable time in completing this questionnaire.

Sincerely yours,

Aaron H. Koodoo

Note: 1. Please indicate your choices on the questionnaire by using a check mark.

2. Ignore the numbers written as (VAR001), (VAR002), etc. They are for office use only.

APPENDIX B

A SURVEY OF GRADUATES AND NON-GRADUATES OF
RED RIVER COMMUNITY COLLEGE

-1982-

Q 1. Did you graduate from RRCC? Check one only.
[VAR001]

Yes No

Q 2. Sex Male Female
[VAR002]

Q 3. What was your age at the time of registration at RRCC?
[VAR003] Check one only.

1 16-18 years 4 25-27 years

2 19-21 years 5 28 or over

3 22-24 years

Q 4. What was your marital status at the time of registration?
[VAR004] Check one only.

1 Single 4 Separated

2 Married 5 Other

3 Divorced

Q 5. Business and Applied Arts
[VAR005]

2 Industrial and Technology

3 Health Sciences

Q 6. 2 years
[VAR006]

2 1 year

3 less than 1 year

Q 7. While attending RRCC, what was your source or sources of funds?

Check one or more.

- | | | | | | | | |
|----------|---|--------------------------|------------------|----|--------------------------|-------------|----------|
| [VAR007] | 1 | <input type="checkbox"/> | Personal savings | 6 | <input type="checkbox"/> | Loan | [VAR012] |
| [VAR008] | 2 | <input type="checkbox"/> | Full-time job | 7 | <input type="checkbox"/> | Scholarship | [VAR013] |
| [VAR009] | 3 | <input type="checkbox"/> | Part-time job | 8 | <input type="checkbox"/> | Bursary | [VAR014] |
| [VAR010] | 4 | <input type="checkbox"/> | Parents | 9 | <input type="checkbox"/> | Manpower | [VAR015] |
| [VAR011] | 5 | <input type="checkbox"/> | Spouse | 10 | <input type="checkbox"/> | Other | [VAR016] |

Q 8. Which of the following best describes your financial situation while at RRCC? Check one only.

- [VAR017]
- 1 I did not have enough money to complete my program.
 - 2 I had sufficient money to complete my program.
 - 3 I had more than enough money to complete my program.

Q 9. What is the highest level of education of your father? Check one only.

- [VAR018]
- 1 Elementary School (Grades 1 to 6)
 - 2 Junior High (Grades 7 to 9)
 - 3 Senior High (Grades 10 to 12)
 - 4 Community College (Diploma or Certificate)
 - 5 University degree(s)

Q 10. What is the highest level of education of your mother? Check one only.

- [VAR019]
- 1 Elementary School (Grades 1 to 6)
 - 2 Junior High (Grades 7 to 9)
 - 3 Senior High (Grades 10 to 12)
 - 4 Community College (Diploma or Certificate)
 - 5 University Degree(s)

Q 11. What is the highest level of education attained in your family by an older brother or sister? Check one only.

[VAR020]

- 1 Elementary School (Grades 1 to 6)
- 2 Junior High (Grades 7 to 9)
- 3 Senior High (Grades 10 to 12)
- 4 Community College (Diploma or Certificate)
- 5 University Degree(s)
- 6 I have no brother or sister

Q 12. What is your father's occupation? Check one only.

[VAR021]

- 1 Clerical (clerk, secretary)
- 2 Farmer (own farm)
- 3 Managerial (own business, company manager, executive)
- 4 Miner, logger, fisherman, farm worker
- 5 Professional (doctor, lawyer, teacher, engineer)
- 6 Sales (retail business, insurance, real estate)
- 7 Semi-skilled worker (factory, mill worker)
- 8 Service (armed forces, police, Hotel & Motel)
- 9 Skilled worker (construction, production, tradesman)
- 10 Technical (technologist, electronic technician)
- 11 Transport (bus, truck, taxi, ambulance, delivery man)
- 12 Unskilled worker (labourer)
- 13 House husband
- 14 Retired/Deceased
- 15 Other

Q 13.

[VAR022]

What is your mother's occupation? Check one only.

- 1 Clerical (clerk, secretary)
- 2 Farmer (own farm)
- 3 Managerial (own business, company manager, executive)
- 4 Miner, logger, fisherwoman, farm worker
- 5 Professional (doctor, lawyer, teacher, nurse)
- 6 Sales (retail business, insurance, real estate)
- 7 Semi-skilled work (factory, mill worker)
- 8 Service (waitress, hotel and motel)
- 9 Skilled worker (production, trade)
- 10 Technical (data processor, medical or dental technician)
- 11 Transport (taxi, Pink Lady, delivery van)
- 12 Unskilled worker (farm worker, domestic service)
- 13 Housewife
- 14 Retired/Deceased
- 15 Other

Q 14.

[VAR023]

What was the highest level of education that you completed before attending RRCC? Check one only.

- | | |
|-------------------------------------|--|
| 1 <input type="checkbox"/> Grade 9 | 5 <input type="checkbox"/> 1st year university |
| 2 <input type="checkbox"/> Grade 10 | 6 <input type="checkbox"/> 2nd year university |
| 3 <input type="checkbox"/> Grade 11 | 7 <input type="checkbox"/> Bachelor's degree |
| 4 <input type="checkbox"/> Grade 12 | 8 <input type="checkbox"/> ABE/GED |

Q 15.

[VAR024]

How many years were you out of school before enrolling at RRCC?

Check one only.

- | | |
|--------------------------------------|--|
| 1 <input type="checkbox"/> None | 4 <input type="checkbox"/> 5-6 years |
| 2 <input type="checkbox"/> 1-2 years | 5 <input type="checkbox"/> 7-8 years |
| 3 <input type="checkbox"/> 3-4 years | 6 <input type="checkbox"/> More than 8 years |

Q 21. How many hours per week, on the average, did you spend studying? Check one only.

[VAR030]

- | | | | | | |
|---|--------------------------|-----------------|---|--------------------------|-----------------------------|
| 1 | <input type="checkbox"/> | 0- 3 hours/week | 4 | <input type="checkbox"/> | 12-15 hours/week |
| 2 | <input type="checkbox"/> | 4- 7 hours/week | 5 | <input type="checkbox"/> | 16-19 hours/week |
| 3 | <input type="checkbox"/> | 8-11 hours/week | 6 | <input type="checkbox"/> | More than 19 hours/
week |

Q 22. How many hours of classes, on the average, did you miss during a week? (Do not include holidays or cancelled classes). Check one only.

[VAR031]

- | | | | | | |
|---|--------------------------|----------------|---|--------------------------|-----------------------------|
| 1 | <input type="checkbox"/> | 0 hour/week | 4 | <input type="checkbox"/> | 5-6 hours/week |
| 2 | <input type="checkbox"/> | 1-2 hours/week | 5 | <input type="checkbox"/> | 7-8 hours/week |
| 3 | <input type="checkbox"/> | 3-4 hours/week | 6 | <input type="checkbox"/> | 9-10 hours/week |
| | | | 7 | <input type="checkbox"/> | More than 10 hours/
week |

Q 23. How many hours per week did you work at a job while attending RRCC? (Do not include assignment and study time). Check one only.

[VAR032]

- | | | | | | |
|---|--------------------------|------------------|---|--------------------------|-----------------------------|
| 1 | <input type="checkbox"/> | 0 hour/week | 5 | <input type="checkbox"/> | 16-20 hours/week |
| 2 | <input type="checkbox"/> | 1-5 hours/week | 6 | <input type="checkbox"/> | 21-25 hours/week |
| 3 | <input type="checkbox"/> | 6-10 hours/week | 7 | <input type="checkbox"/> | 26-30 hours/week |
| 4 | <input type="checkbox"/> | 11-15 hours/week | 8 | <input type="checkbox"/> | More than 30 hours/
week |

Q 24. Choose the statement which best describes how you organized your time with respect to school work. Check one only.

[VAR033]

- 1 I never seem to have adequate time to do the minimum amount.
- 2 I seem to have adequate time to do the minimum amount of work.
- 3 I always seem to have more than enough time to do the minimum amount of work in my courses.

Q 25. With whom did you generally live while attending RRCC?
Check one only.

[VAR034]

- 1 Alone
- 2 With parents
- 3 With parents and other family members
- 4 With wife/husband
- 5 With wife/husband and children)
- 6 With roommate
- 7 With roomates
- 8 Other

Q 26. Answer No or Yes for each of the following two questions.

[VAR035]

	<u>No</u>	<u>Yes</u>
(a) While attending RRCC, were you a member of the student council or any student organization?	1 <input type="checkbox"/>	2 <input type="checkbox"/>

[VAR036]

(b) Did you participate in any sports while at RRCC?	1 <input type="checkbox"/>	2 <input type="checkbox"/>
--	----------------------------	----------------------------

Q 27. To what extent did each of these reasons influence your decision to attend RRCC? Check one box for each statement.

		No Extent	Some Extent	Great Extent
[VAR037]	1 RRCC offered the course or trade that I needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[VAR038]	2 I wanted to be able to earn a higher wage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[VAR039]	3 I could not get into university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[VAR040]	4 I could not afford to go to university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[VAR041]	5 To please my parents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[VAR042]	6 To please my wife/husband/boyfriend/girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[VAR043]	7 All or most of my friends were attending RRCC.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[VAR044]	8 An agency (eg. Manpower) was willing to sponsor me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[VAR045]	9 Other.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q 28. Which statement would indicate your parents' interest in your education while you were in attendance at RRCC? Check one only.

[VAR046]

- 1 Your parents gave you no encouragement to continue your education.
- 2 Your parents gave you some encouragement to continue your education.
- 3 Your parents gave you much encouragement to continue your education.

Q 29. Which of the following best describes your awareness of the counselling services available at RRCC? Check one only.

[VAR047]

- 1 I knew nothing about them.
- 2 I knew very little about them.
- 3 I had a fair idea about them.
- 4 I felt that I was well informed about them.

Q 30. While in attendance, did you ever visit a counsellor at RRCC? Check one only.

[VAR048]

- 1 Yes
- 2 No

Q 31. If your answer to the above question is yes, for what reason(s) did you visit a counsellor? Check one or more.

[VAR049]

- 1 Personal-social
- 4 Career choice [VAR052]

[VAR050]

- 2 Financial
- 5 Entrance/Withdrawal Advisement [VAR053]

[VAR051]

- 3 Academic
- 6 Other [VAR054]

Q 32. If you had financial problems while attending RRCC, and you sought help, did you get it? Check one only.

[VAR055]

- 1 Yes
- 2 No
- 3 I did not seek help

Q 33. If your answer to question 32 is yes, were you satisfied with the help? Check one only.

[VAR056] 1 Yes 2 No

Q 34. If you had personal problems while attending RRCC, and you sought help, did you get it? Check one only.

[VAR057] 1 Yes 2 No 3 I did not seek help.

Q 35. If your answer to question 34 is yes, were you satisfied with the help? Check one only.

[VAR058] 1 Yes 2 No

Q 36. Which statement best describes how you felt about the size of RRCC campus?

[VAR059] (Consider number of students, area of land, number and size of buildings). Check one only.

- 1 It was too small.
- 2 It was the right size.
- 3 It was too large.

Q 37. How friendly did you perceive most of your instructors to be? Check one only.

- [VAR060]
- 1 Unfriendly
 - 2 Friendly
 - 3 Very friendly

Q 38. How helpful did you perceive most of your instructors to be?

- [VAR061]
- 1 Not helpful
 - 2 Helpful
 - 3 Very helpful

Q 43. Indicate the number of times that you met informally with an instructor, for each of the specific reasons listed below, while you were at RRCC. Check one box for each statement.

		TIMES MET				
		0	1 - 3	4 - 6	7 - 9	More than 10
[VAR070]	a) To get basic information and advice about your academic program.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR071]	b) To discuss matters related to your future career.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR072]	c) To help resolve a disturbing personal problem.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR073]	d) To discuss intellectual or course-related matters.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR074]	e) To discuss a campus issue or problem.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR075]	f) To socialize informally.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Q 44. Indicate whether you agree or disagree with each of the following statements.

	Agree	Disagree
[VAR076] a) At RRCC, the students are involved in decisions that affect them.	2 <input type="checkbox"/>	1 <input type="checkbox"/>
[VAR077] b) At RRCC, there are too many stringent rules and regulations.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
[VAR078] c) At RRCC, the opinions of the instructors are the only ones that matter in academic class work.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
[VAR079] d) At RRCC, the administration is always making all the decisions.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
[VAR080] e) At RRCC, the student has to complete the core requirements.	2 <input type="checkbox"/>	1 <input type="checkbox"/>
[VAR081] f) At RRCC, the student is given the privilege of selecting additional preferred courses.	2 <input type="checkbox"/>	1 <input type="checkbox"/>

Q 45. Check the statement which best describes how confidently you felt when doing school work. Check one only.

- [VAR082] 1 I did not feel confident most of the time.
 2 I felt confident most of the time.
 3. I felt very confident most of the time.

Q 46. Answer No or Yes for each of the following questions.

	No	Yes
[VAR083] a) Would you say as a whole that you are a successful person?	1 <input type="checkbox"/>	2 <input type="checkbox"/>
[VAR084] b) Do you perceive yourself as being successful?	1 <input type="checkbox"/>	2 <input type="checkbox"/>
[VAR085] c) Do you perceive your course/trade as making a useful contribution to society?	1 <input type="checkbox"/>	2 <input type="checkbox"/>

Q 47. To what extent do you agree or disagree with each of the following statements. Check one box for each statement.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
[VAR086] a) Most instructors made allowances for the differing abilities of students.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR087] b) There was some allowance for group activities.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR088] c) Most instructors listened to students' personal problems.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR089] d) Most learning materials were geared to the level of the learner's ability.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR090] e) There were flexible time tabling and scheduling of classes.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR091] f) The assignments were generally related and contributed to the understanding of the subject matter.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR092] g) Most instructors treated me fairly.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR093] h) Most instructors were generally interested in what a student had to say.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR094] i) Most instructors made me feel that I was capable of coping with the level of work.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Q 47. (Continued)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
[VAR095] j) Most instructors taught their courses in such a way that I was able to succeed.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR096] k) Most instructors returned my assignments/tests early enough for them to be valuable to me.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
[VAR097] l) Most instructors made useful comments on my papers.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

THESE TWO QUESTIONS ARE TO BE COMPLETED BY NON-GRADUATES ONLY

Q 48. Which statement or statements best describe your reason(s) for withdrawing/not graduating from RRCC. Check one or more.

- [VAR098] 1 I did not have sufficient funds to continue.
- [VAR099] 2 I had already failed a test or tests in the course.
- [VAR100] 3 I could not cope with the level of work.
- [VAR101] 4 I did not like some of the teachers.
- [VAR102] 5 I did not like the course content.
- [VAR103] 6 I felt lonely.
- [VAR104] 7 I had domestic problems.
- [VAR105] 8 I lost interest in school.
- [VAR106] 9 I was bored with some of my courses.
- [VAR107] 10 I did not like the way my subjects were taught.
- [VAR108] 11 I found a job.
- [VAR109] 12 I got married.
- [VAR110] 13 I got pregnant.
- [VAR111] 14 Other

Q. 49. Which of the following best describes your intention regarding continuing your education? Check one only.

- [VAR112] 1 I will return to RRCC to continue my studies.
- 2 I will attend another school to continue my studies.
- 3 I will not return to any school again.

Thank you for completing this Questionnaire. You may use this page to write any comments that you wish. Thanks again.

COMMENTS:



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Telephone 204/632-2311

Aaron H. Koodoo BSc., B.Ed., CAE.
Department of Industrial Technology

APPENDIX C

April 1, 1982

Dear

I know that you meant to complete the previous questionnaire but may have forgotten to do so. In order that you may be included in this study, I am sending you a second copy.

Your name has been chosen as part of a group study from a list of graduates and non-graduates who attended Red River Community College sometime between 1979 and 1981. While this study is being conducted as part of my Masters' Thesis in the Faculty of Education, the Director of Counselling Services and the Director of the Tutorial Centre at Red River Community College are also very interested in the results. They have been instrumental in the development of some of the questions on the questionnaire.

The purpose of this study is to identify differences between graduates and non-graduates. Current information on these two groups at the community college level is virtually non-existent. You are the only source of information, and as a result, I wish to request that you complete the attached questionnaire. It takes 10-15 minutes to complete. Your participation is not simply important, but it is vital to the success of this study.

All information that you provide in the questionnaire will be kept strictly confidential. Your name is not needed on the questionnaire, and it will not be used in any way, except to mail this material to you.

I would be most grateful if you would return the completed questionnaire in the enclosed postage-paid, self-addressed envelope before April 17, 1982. I will be most pleased to send you a summary of the survey results.

Thank you for your valuable time in completing this questionnaire.

Sincerely yours,

Aaron H. Koodoo

Note: 1. Please indicate your choices on the questionnaire by using a check mark.

2. Ignore the numbers written as (VAR001),(VAR002) etc. They are for office use only.