ABSTRACT
        In order to determine what Central YMCA Community
College can do to reduce student dropout rates, a series of
questionnaires was developed and SRS information system data were
analyzed for fall 1975. One questionnaire collected information from
faculty on student attrition through the first eight weeks of the
fall 1975 semester to find out what kinds of students dropped out,
and when. Two questionnaires were administered to systematic samples
of students and faculty to determine what student services were
valuable in holding students. A Registrar Deficiency Study provided
information on how many and what types of students dropped out during
the first week of classes, while SRS data gave "time delay"
information on dropouts (comparisons for several weeks). The
complementary insights provided by these various sources of
information led to the following conclusions: (1) Over 30% of the
student population can be identified at the end of registration as
likely dropouts. (2) The highest dropout rate occurs in the first
week of class. (3) Instructors are providing ingredients critical to
helping students succeed. (4) Counselors provide services only on
request. (5) SRS data are out of touch with student enrollments from
the point of registration until grades are assigned. On the basis of
these conclusions the development of an Early Intervention Model is
recommended. (NHM)

ATTRITION/RETENTION STUDY

CENTRAL YMCA COMMUNITY COLLEGE

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INTRODUCTION

This report terminates the Attrition/Retention study designed to pinpoint what actions the Central YMCA Community College can undertake to decrease intra- and inter-semester dropout rates.

The report has four chapters.

Chapter One details the salient conclusions of the study and presents four basic recommendations.

Chapter Two lays out the original goals and objectives of the study.

Chapter Three summarizes the hypotheses used in the study, and presents the disparate data and conclusions generated from student records, a student questionnaire, and a faculty questionnaire.

Chapter Four summarizes the insights of Chapter Three in the form of general conclusions and recommendations for improving basic information services, targeting student services, and developing an intervention technique. It also outlines some of the critical steps that need to be undertaken to implement the Early Intervention Model.

The data (2,000 pages of computer printouts) from which the report has been prepared is stored in the Office of Institutional Research of the College.

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APPENDICES

A. Hypotheses and Definition of Dropout

B. Student Questionnaire

C. Faculty Questionnaire

D. List of Print-out Packets

E. SRS Major Codes by Student Reported Major Codes

Chapter One

SUMMARY: CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. Out of the total student population of 4700, some 1500 (31%) can be identified at the end of registration as persons most likely to drop out of college.

2. The highest dropout rate occurs in the first weeks of class -- in fact, one out of every twelve students registered in Fall, 1975 had dropped out by the second week of class.

3. Teachers and students agree that the majority of instructors are providing the ingredients critical to helping students succeed:

   a) clear delineation of course activities and objectives;

   b) regular feedback to students on their individual progress;

   c) individualized instruction, tailored to particular students;

   d) academic advising on an ongoing basis, if requested.

4. Counseling services at Central are basically reactive -- meeting the press of *student requests* for advice and help.

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5. The majority of students never see a counselor outside of registration times.

6. A large part of the population of CYCC can do (has been doing) quite well with little or no student services beyond registration advising.

7. The F-1 visa student has the lowest dropout rate of any sub-group in the College.

8. There are two definable populations with high dropout rates:

    -- part time real estate and secretarial students;
    -- full time students taking remedial non-credit courses.

9. The SRS information system is presently out of touch with student enrollments, from the point when a student registers until final grades are put into the system.

10. The present SRS Major codes bear little resemblance to the programs the students claim they are actually following.

Recommendations

1. Review and revise the SRS data base and report structure to provide timely, useful information to the College.

2. Implement a simple, direct Early Intervention Model that

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targets student service resources at the 31% who drop out
early in each semester. The elements of the model are:

  . Identify students at the end of registration.

  . Provide teachers with a computerized method of
    advising the student services department of
    potential dropouts.

  . Provide <u>active</u> services (seeking out students) to
    the target population from the first week of class
    until the student is able to operate without the
    services.

3. Build a regular process of "dropout population analysis"
   into the ongoing operation of the Office of Institutional
   Research to keep the Early Intervention Model identifica-
   tion process current with the latest student trends.

4. Articulate the specific amount of student services
   resources (new and current) that the College will dedicate
   to the Early Intervention Model for Fall, 1976.

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Chapter Two
STUDY GOALS AND OBJECTIVES

The Attrition/Retention study has always been intended
as an action project: to identify what the College can do to
reduce student dropout rates (a "dropout" is a student who comes
to CYCC and leaves without a clear path to travel for further
education or work; an operational definition is given in Appendix
VI).

The Goals were to:

a) hypothesize what services affect dropout rates;

b) test the hypotheses through a series of question-
naires and data analysis of SRS information;

c) generate specific plans for providing (add, subtract,
change) improved academic and non-academic (class-
related and general student services) support acti-
vities.

The original time frame of the study was to: present the
ideas for change before Christmas, 1975; obtain decisions in
January, 1976; and implement changes in February, 1976. Due to
myriad difficulties, these time frames became impossible,
although there was an attempt to implement some changes for
Spring, 1976 registration. This plan was aborted because it
was recognized that the necessary rapid information from the
SRS data base could not be obtained in the first weeks of class.

The Objectives constituted a work plan to achieve the goals.

A. Generate hypotheses and necessary definitions through discussion.

B. Collect information from Fall, 1975 SRS data base that would give "time delay" information on drop-outs (comparisons for several weeks).

C. Collect from teachers paper records of student attrition through the first eight weeks of the Fall, 1975 semester to find out what kinds of students dropped, and when.

D. Utilize the Registrar Deficiency Study to ascertain how many and what types of students dropped out during the first week of class.

E. Administer a questionnaire to a systematic sample of students around the eighth week of the Fall, 1975 semester to answer service questions generated from the hypotheses developed under Objective A.

F. Administer a questionnaire to a systematic sample of faculty persons to answer service questions generated in the hypotheses of Objective A.

G. Transfer data from SRS files of Fall, 1974; Spring, 1975; and Fall, 1975 to SPSS format and then do systematic analyses of "non-return" (those who have left CYCC after the semester in question) and "dropout" students (those who do not return, graduate, or get what they needed from CYCC; cf. Appendix A).

The Objectives constituted a *confluence of evidences* technique for research. The assumption from the start of the study was that no one of the data sources pursued in the eight objectives would be sufficient to test the hypotheses and suggested courses of action, but that a sufficiently clear picture would emerge from the complementary insights provided by the various sources of information.

It was also assumed that the confluence would give sufficient insights to avoid any gross misinterpretation of service effects of the *post hoc ergo propter hoc* variety.

Chapter Three

RESULTS OF STUDY OBJECTIVES

A. Hypotheses and Definitions

The complete list of hypotheses and definitions are given
in Appendix A. Reduced to their most basic components, the
hypotheses stated that there are relations between "non-return"
in/or "dropout" students and the following kinds of services:

a. Helping a student decide early in the year on a
major course of studies or academic program would
increase the chances for his success.* Included in
this thesis was the position that if a student chose
a program early, that student would be successful
no matter who gave help in the choice.

b. Specific-objectives teaching (clearly telling the
student what was expected in the way of performance
and what sort of results could be hoped for at the
end of a course or program) would contribute to
successful college work.

c. Faculty availability (outside of class) and actual
use of this availability by students would increase
academic success.

d. Registering at "early registration" (in August for
the Fall semester; in December for the Spring semes-
ter) would enhance chances for success.

e. Student/counselor contact would enhance success.

f. Financial aids would have either a positive or a
negative impact on student success.

g. External, uncontrolled influences (especially failures
at schools attended previous to Central) would nega-
tively affect student success. Included in this the-
sis was the position that attendance at a Chicago
Public High School contributed negatively to success.

*Success is defined as "not dropping out" - i.e., either
returning to Central for further study or clearly completing
the task begun at Central.

h. External, personal influences (money and personal problems) would contribute negatively to success.

i. Biographical analysis of student groups would allow the school to target certain groups for more intense extra-classroom academic and non-academic services.

All the hypotheses were meant to accomplish two purposes:

1. To identify what services the College could provide which seemed to enhance student success.

2. To identify sub-populations of the total student body for student support services.

The remaining seven objectives, as actually implemented, provide the "confluence of evidences" that establish the validity or non-validity of the various hypotheses.

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B.   Time Delay Information from Fall, 1975 SRS Data

This objective assumed that we could follow the intra-semester dropout (student who stops attending class) through the SRS data by taking a series of readings over several weeks.

We hoped to compare the class lists of the seventh week of the semester with those of the first or second week, to find out what kinds of students dropped.

This objective was dismissed after the first series of tests showed that the SRS class lists did not change. To be sure, students were dropping out, but this information did not get into the SRS data base. Consequent interviews with data processing, registration, and teacher personnel confirmed that the SRS information is almost completely out of touch with the actual facts of student attendance from the end of registration until final grades are submitted.

Hence the results from Objective B relate to the use of the SRS information system rather than to intra-semester dropouts.

Conclusion: Since no one updates information in the SRS relative to student attendance, the system provides no useful information about student attendance.

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C. Paper Records of Dropouts from Systematic Sample

The partial records collected and tabulated by the released-time faculty member for the first four weeks of class confirmed all the hypotheses from the Kirby study of the previous year. The largest drop out occurs during the first week of class.

Final calculations have not been returned in time to be included in this report.

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D. Registrar Deficiency Report

In November, the Registrar of the College requested that all teachers submit a "deficiency report" on scanner forms during the seventh week of the Fall, 1975 semester.

Information on 410 dropouts from 140 classes was collected, allowing for biases: 1) the Real Estate Division did not participate in the study; 2) students with FLL majors were under-represented. .

A premature tape erasure of some critical data, typical of the problems incurred throughout this study, made it impossible for us to analyze the information available on tape. (We recount this problem in some detail to help the reader understand some of the recommendations made later in the report.)

The scanner sheets were processed at Triton College and two reports from the SRS system were produced ("Dean's Report" and "Counselor's Report"). The reports were of limited use since they were basically listings rather than analytical tables. Once these reports were completed, the file from which the scanner sheets was generated, and according to which the scanner sheets could be interpreted, was destroyed. Hence, although the College possessed a tape of the scanner sheet information, this data could not be used for any further analysis, because the base file, needed for identifying what classes the dropout students were from, and for recreating the populations of students from these same classes who had not dropped out, was no longer available.

In order to make some good use of the data, the information had to be re-keypunched from a print-out and then we had to construct a "comparison" population of students who had been in the same classes from the total population of Fall, 1975 students.

Thus, this project that should have taken five man hours and \$75 computer time, cost fifteen man hours, \$250 computer time, and \$50 keypunch expense; all because no one thought to retain the basic reference tape that could unlock the data for further analysis once the two canned reports (which turned out to be useless to all concerned) were completed.

Taking into account the limitations of the population, the final results of the Deficiency Report were quite interesting.

(CAUTION: The percentage figures given in the following conclusions are strictly relative. Because we had to create a "comparison" population, we were not able to recreate the actual situation. Hence the norm of 42.7% dropout rate for the entire population is an artificial "norm," not the actual dropout rate. There were some further technical adjustments to neutralize other biases, that are not discussed in this report.)

1. The dropout rate of students from the Developmental Institute (i.e., students with Major of GED, Pre-College, DI) was 68.5%, compared to the overall figure of 42.7%.

2. The dropout rate of students taking three and four courses was significantly higher than persons taking one, two, or five courses.

3. Those registering in August had significantly lower dropout rates than those registering in September.

4. Blacks had significantly higher dropout rates than other races; F-1 visa students had significantly lower.

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5. Those taking no "credit" courses had a very high dropout rate (68.5% versus 42.7% for the total group).

6. Those taking twelve or more "instructional" hours had the highest dropout rate of all -- 73.3% versus 42.7% for the total group.

7. Having financial aid of some sort (or type of financial aid) did not relate to dropout statistics.

The picture that emerges is fairly definite. Considering those students who are taking courses at the 211 West Wacker campus (minus the ELI and Real Estate majors), the greatest intra-semester drop out occurs with the Black students taking remedial courses. And it takes place in the first week of class (the Deficiency Report is based on drop outs in the first week of classes).

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L. Student Questionnaire Analysis

The student questionnaires were distributed to a systematic sample of classes. Because the Real Estate Division declined to cooperate, this group was missed. Because the questionnaire printing was delayed three weeks, the ELI classes were missed (they had already completed their eight-week term).

Further checking for skews has shown that the question-naires are biased in the following directions:

- low on Caucasions; high on Blacks;

- high on females; low on males;

- low on students taking one or two courses; high on those taking four and five courses.

These are quite predictable biases given the lack of Real Estate Division and ELI data.

A further, but less obvious, skew is that the respondents to the questionnaire are those who have not dropped out in the first seven to ten weeks of class. These are the ones who are "making it" at Central.

The student questionnaire concerned itself with:

- <u>Program (major) Decisions</u> -- when, how, what impor-tance the students place on these decisions, who helped the students make the decision.

- <u>Planning</u> -- what, how, when do the students plan their college program.

- <u>Class Activities</u>: - course activities and objectives
    - progress reports to students
    - attendance policies

- Student Perception of Class and Teacher -- progress; contact with teacher in and out of class.

- Counseling -- contacts; whether counseling is active or passive in seeking out students; whether students think they need academic counseling.

- Admissions and Orientation -- what contacts students have had prior to classes and at start of school year; why students pick Central.

- Previous Academic Experience -- high schools attended; colleges attended; with what success.

- Personal Responsibilities and Attitudes -- financial; if thinking of quitting, why?

The results of each question, with cross-tabulations for selected sub-populations, are contained in the print-out packet (500 pages) available in the College's Office of Institutional Research.

Regarding college and career plans, we learned from the questionnaire that the students:

- are definite about their immediate career and college plans;

- are much more definite about their college programs than SRS records would predict (less than 5% undecided, compared to 41.5% on SRS records *for the same* students);

- have college program plans that only vaguely resemble SRS information possessed by the school (see Appendix E);

- think that deciding on a college program or major early in one's college experience is *"very important"* (75.8%);

- know what program they will pursue before starting at CYCC (70.9% were definite; 24.3% fairly sure; only 4.8% undecided).

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Regarding how college program and career decisions have been made, we learned that the students:

- received very little program counseling at their first registration at CYCC (54% had no help; 26.9% exchanged a few words; 18.1% entered into discussion about a program);

    (NOTE: Since most students had already made up their minds, many would not have wanted help, so the statistics do not mean that academic advisors were remiss in their duties.)

- were divided in their response as to whether more academic program advising at the start of college would have helped them (53.4% said yes; 46.6%, no);

- made most program decisions themselves, with little assistance from others (75.0%);

- did not discuss majors or programs with faculty (65.8%);

- are divided in how they choose specific courses each semester (49.3% decide for themselves, frequently using a catalog program outline; 41.9% consult with a teacher; 2.1% consult primarily with friends).

Regarding classroom activities, the students report that:

- more than half the teachers (56.1%) in the classes surveyed tailor course requirements to students' individual needs;

- in three out of four cases (72.9%) teachers have been able to help students with class-related problems, once the student asked for assistance;

- teachers give frequent tests or assignments and report results back to students in a week or two;

- most teachers (80.4%) give very clear, written outlines of what is to happen in class during the semester;

- most teachers stick to their course plans (81.3%);

- a substantial number of teachers (41.5%) link specific assignment completion to particular course final grades;

. teachers demand attendance (68.8% expect students to
be present at every session); but more than half the
students had missed more than two sessions in the
first eight weeks (13.1% had missed more than four
classes);

. the median class size (actual class attendance) is
fewer than 20, with 82.8% reporting class attendance
not usually over 25 persons.

Regarding grading, evaluation, and attendance, students

report that:

. they understand grades and teacher demands fairly
well (56.4% have a very clear idea how they are graded;
17.8% do not understand; on another question, 59.3%
were very sure about what is demanded in the course,
while 16.9% do not know what is demanded);

. they can predict their grades (83%), usually on the
basis of specific projects tied to the grade (26.9%),
or on the basis of teacher reputation (45.3%).

Regarding their dropout thoughts:

. only one in four (22.2%) thought of dropping the
course sampled; most of these have stayed because they
need the course to graduate, stay in a program, or
keep a job;

. a majority said that the reasons most likely to make
them drop the course were personal (59.7%), with
financial problems heading the list;

. One out of every four thought they might have to drop
the course because they were doing poorly.

Regarding counseling, American students report that:

. most (64.5%) have never received services from coun-
selors outside of registration (10.3% had seen a
counselor often -- more than three times in eight
weeks);

. very few go to counselors with personal problems
(12.9% reported two or more instances; 12.5% once;
58.2% not at all).

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Foreign Visa students report that:

- Most (59.5%) students do not talk to the foreign student advisors about non-visa matters;

- the foreign student counseling is almost totally reactive regarding class performance (91.4% have never been called in to talk), or other non-visa matters (90% have never been called in to talk about anything but their visa).

Regarding Admissions and Orientation, students report that:

- one out of three (33.9%) attended orientation;

- almost half (45.8%) never knew there was an orientation;

- almost a third (31.5%) had contact with someone at Central before starting classes at CYCC;

- fewer than 5% of the American-born students had contact with Set-Go Assessment Center, Seven Nations, Set-Go Latino, or Quetzalcoatl.

Regarding previous high school and college attendance, students report that:

- 66.8% have graduated from high school;

- 13.5% have obtained a GED;

- 8.3% are still in a pre-college program at CYCC;

- 85.8% of those answering the question about high school said they went to at least one Chicago public high school; 62% of these graduated from a 'public high school;

- 25.6% attended college before CYCC (one-fifth of these at Kennedy-King, Loop, or Malcolm X);

- of those attending college before CYCC, the majority did well at their previous school (67.3% had A's, B's, and C's; 32.7% had done poorly);

- the contributing factors to their decision to come to Central were (in descending order):

  - parents and relatives (46.1%)
  - friends (36.1%)

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- high school counselor/teacher (30%)
- financial aid package (29.4%)
- never considered another school (27.4%)
- impressed by CYCC recruiter (20.4%)
- could not get into any other school (17.8%)
- knew a teacher at Central they liked (10.8%)

Regarding personal responsibilities, students report that:

. half (51.8%) support themselves and at
least one other person;

. fewer than half (43.4%) have a job;

. students with jobs work the following number of hours
per week:

- 13.2% work 1 to 10 hours
- 40.0% work 11 to 20 hours
- 36.2% work 21 to 40 hours
- 10.5% work over 40 hours per week.

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F. Faculty Questionnaire

The faculty questionnaire was designed to pick up information about how the faculty view:

- program (major) planning
- registration advising and technical matters
- non-registration advising
- classroom activities and results
- student preparedness to do the course work
- English and math placement services

Due to a number of delays and miscommunications, only 39 usable responses were received from 29 different individuals. The respondents represent a wide spectrum of courses (minus Real Estate) as can be seen from the following table; but the responses should be accepted with caution, as fewer than 50% of the teachers are included.

	N	$\%$		N	$\%$
ACC	3	7.7	ENG	2	5.1
ART	1	2.6	HIS	1	2.6
RAD	1	2.6	HUM	1	2.6
MDT	1	2.6	PTA	1	2.6
BUS	2	5.1	MAT	2	5.1
BIO	1	2.1	RES	2	5.1
CHM	1	2.1	SEC	1	2.6
CMS	1	2.1	SOC	1	2.6
ECO	1	2.1	SPA	1	2.6
DTE	2	5.1	SPE	1	2.6

Not Identified 11 28.2

The highlights of the faculty answers are:

54.1   Folders for continuing students not very useful.

58.0   Had time first two days to talk to some students about more than scheduling.

51.0   After first two days, time to talk to most.

57.1   Do not try to get students to settle on program early.

62.1   Think a minority of students have clear program.

72.0   Have not worked 12-week registration.

75.0   Say only minority (45.8% only a few) of students understand major codes presently used.

91.0   Consider it their responsibility to keep attendance records.

85.0   Have done some advising outside times of registration this semester.

61.0   Have helped 11 or more students with class scheduling this semester, outside times of registration advising.

51.0   Give homework at least once every two weeks.

50.0   Give homework at least once a week.

80.0   Return homework within a week after assignment.

80.0   Return graded quizzes within a week.

55.0   Relate specific assignments to specific course grades.

57.0   Have no idea how reading placement is working.

55.0   Have no idea how math placement is working.

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G. Results of SRS Data Analysis of Dropouts
    From Fall, 1974 and Spring, 1975

The last hypothesis from Appendix A states that analysis
of just what kinds of students drop out of CYCC would lead to
insights into service recommendations.

To accomplish this task, a 25% sample of students was
selected from Fall, 1974 and Spring, 1975 SRS records for con-
sideration. The analysis reviewed:

- Resident code (Junior College, DI, ELI, etc.)
- Major (using a reduced list)
- Race
- Age (categorized)
- Place of residence (zip code)
- Credit hours
- Instructional hours (for Fall 74 only)
- Financial aid received
- Work-study amount received
- Whether strictly an evening student or combination
  day/evening
- Month registered
- Sex
- Part time, full time, ELI

These variables were also scrutinized controlling for
race, day, evening, and PT/FT status.

Finally, the data of the two semesters were compared to
ascertain inter-semester differences.

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The results are presented here for:

1. Fall, 1974

2. Spring, 1975

3. Comparison of Fall and Spring

1. Fall, 1974 Dropouts

The first thing to note is that, while 44% of the students did not return to CYCC in Spring, 1975, only 25% can be classified as dropouts. They are concentrated in two segments of the college population:

-- White, part time, real estate students who live in the suburbs and who registered in September or October for one or two courses.

-- Black students who are taking mostly non-credit remedial courses and who registered in September for more than two non-credit courses and no credit courses.

Interestingly, financial aid and work study correlate negatively with dropout status. Those not receiving financial aid, or CWS monies are more likely to drop out. This phenomenon, of course, was influenced primarily by the white, part time, real estate population.

Early registration reduces a student's chances of dropping out.

2. Spring, 1975 Dropouts

As with the Fall, 1974 population, the non-return rate was

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higher than the dropout rate (61.6% compared to 37.4%).

The dropouts fall into two identifiable populations:

-- white, real estate types

-- black males, and, when resident status is Junior College, Puerto Ricans who registered in February and who are taking remedial non-credit courses.

An important insight *hinted at* in the F74 data, but very clear for S75, is that the F-1 visa students have a very low dropout rate (19.9%, compared to an average of 37.4% for the total group).

3. Comparison of Fall and Spring

First, the semesters show several significant differences not related in any way to the question of drop outs.

- There are more persons with an "LAS Unspecified" major code and fewer persons with just an "Unspecified" in the S75 than in F74.

- There are fewer F-1 visa students and more Blacks in S75 than in F74.

- Many more students took advantage of early registration in S75 than in F74.

- There are fewer persons aged 23-34 and more persons aged 35-45 in S75 than in F74.

- Students received slightly more financial aid in S75 than in F74.

Regarding resident status (Junior College, DI, ELI, etc.), number of credit hours attempted, zip code, day/evening, and sex, there are no differences between semester.

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The change in majors is interesting and frustrating, as we cannot be sure if the students are different, or persons registering students are pursuing a different approach in S75 than in F74.

The dropout populations of F74 compared to S75 exhibit further differences:

- More students with Junior College resident status dropped out in S75 than in F74.

- Fewer Caucasians dropped out in S75 than in F74.

- A great many more students carrying 12 or more credit hours dropped out in S75 than in F74.

- Early registration was not as related to reducing dropout rates in S75 as it was in F74.

The data from each individual semester and the two semesters considered in relation to one another leads us to two critical conclusions:

1) The dropout-prone population can be identified during registration (Black, remedial, non-credit students).

2) The Fall and Spring semesters differ both in the total population characteristics and in the dropout population characteristics.

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Chapter Four

CONFLUENCE OF EVIDENCES:
CONCLUSIONS AND RECOMMENDATIONS

Chapter Three presented a series of disparate facts and inferences based on records, student perceptions, and faculty judgments.

In this section we will use these separate parts to form a cohesive picture. Since this report is action-oriented, this section will be structured around conclusions and recommendations rather than descriptions.

Chapter Four has four sections:

A. Basic Information: A Condition for Services

B. Targeting Resources for Service

C. Support Services: The Basic Program

D. The Sequence for Implementing the Intervention Model

A. Basic Information: A Condition for Services

Conclusions

Rapid, accurate, easily-comprehended information is a necessary condition for dropout intervention. We have already seen that:

- dropouts can be identified (with reservations) at registration

- dropouts leave early in the semester

- current SRS data is out of touch with reality, from registration to final grades

- current SRS reports offer little assistance to those seeking to help reduce dropout rates

We also discovered in the course of the study that much of the SRS data is stored in a chaotic *mixtum-gatherum* fashion that makes it difficult to even find previous semester data. We estimate that almost $1,000 was wasted on this study, because we were given incorrect tapes and tapes with missing data.

In addition, there seems to be a gap between user desires and actual EDP service. One administrator has been turning in the same data and report requests for two years without success. Another has had 60% of his requests for reports unmet in the past year. We found that 50% of the variables in a new financial aids data base were unused.

As one administrator put it, "Despite new personnel, changed computers, new versions of SRS, and umpteen hours devoted to WICHE/NCHEMS, we still have to cancel plans for rapid service

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because we cannot obtain accurate, immediate data from our compu-
ter. Very little has improved in the past five years!"

Recommendations

A. That the entire SRS data base be re-thought from the
user perspective:

1) removing variables for which information cannot
be obtained;

2) changing data input procedures to insert research-
type information for samples of students during
non-registration times;

3) adding needed variables such as graduation,
transcripts sent, etc.;

4) straightening out variable usage; e.g., admissions,
cumulative credit hours, class status, etc.

B. That the SRS reporting system be reviewed and updated
to meet user need.

These two recommendations are needed for the computer
operations independently of the Early Intervention Model re-
commended below.

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B. Targeting Resources for Intervention

Conclusions

The name of the game is learning to serve students without
increased personnel or materials cost. One of the important
conclusions of this study is that a large portion of the student
body can get along (probably has been getting along) with prac-
tically no outside-classroom help. Specifically:

. F-1 visa students have demonstrated that they can
   be quite successful at CYCC with help only on visa
   matters (estimated F75 population 518, 10.9%).

. Real Estate and part time Secretarial students can
   be left to their own devices because their completion
   or non-completion of courses is so affected by out-
   side influences beyond the control of CYCC, and be-
   cause dropping out does not represent a significant
   trauma for these persons (estimated F75 population
   702, 14.7%).

. A fairly large group of students have reported in the
   student questionnaire that they can plan a program,
   choose classes, and successfully complete courses
   by themselves, once they have a catalog (estimated
   F75 population 1000, 21%, not including previous
   groups).

. In this study we have been able to target (with reser-
   vations since semester populations change) a group of
   students whom we can identify from registration data
   who need dropout intervention services (estimated popu-
   lation for F75 1500, 31%).

. From previous studies we know that teachers can iden-
   tify, early in the semester, students who will prob-
   ably drop out (estimated population 200, over and
   above the 1500 just mentioned, 4%).

Hence we see that there are some 2220 students (46.5% of
the total student body) who need little or no support services,

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DANIEL J COFFEY
ASSOCIATES

and 1500 (31%) who definitely need services if they are to survive academically at Central. The remaining 1050 (22%) need to be watched to see whether they need services.

Recommendations

A. That the school commit most of its student service resources to the 31% of the students who can be identified as potential dropouts at the end of registration and during the first three weeks of class.

B. That the College make every effort to economize on services to part time Real Estate and Secretarial students.

C. That the College critique what services are currently provided for F-1 visa students with a view to identifying which are critical to success and to see if any existing services can be curtailed because they do not meet actual student needs.

C. Support Service Program Contents

Conclusions

Final program specifics will certainly depend on insights
from Student Services Division as well as from top College ad-
ministrators, but we can outline a suggested basic approach
in sufficient detail to give direction to the process.

We hypothesized that:

. *Individualized teacher attention would be important
to low attrition;* this study supports that teachers
at CYCC are already providing such attention on
classs-related matter.

. *Early decision-making about college programs and
majors enhances one's chances of success.* The
students who are succeeding at Central agree with
our hypothesis and further add that most of them
made these decisions themselves before reaching
Central. CYCC provided very little help.

. *Early registration would be related to higher reten-
tion.* The study data agree, but point out that
early registration for Spring, though more prevalent
than for Fall, is not as effective for reducing
attrition. It is logical to assume that early registra-
tion, especially in August, might be a manifestation
and not a cause.

But we are still on safe ground to suggest that every
attempt to get students to use early registration will
pay dividends in increased retention.

. *Dropouts occur early in a term.* The teacher records
and the Registrar Deficiency Report confirm this hy-
pothesis. One out of every 12 students had dropped
out of class by the end of September in Fall, 1975.

. *Classroom policies affect dropouts.* And the students
report that their teachers already provide individua-
lized attention, frequent tests or homework, feedback,
and clear directives on what is to happen throughout
the semester. The teachers report (confirmed by stu-
dents) that they are strict about attendance. All

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of these items appear to be effective and appreciated by the students.

- *Counseling services were critical to high retention.* We found that many of the students had <u>never</u> received counseling services (certainly many did <u>not</u> want such services). At the very least we must conclude that the counseling and student support services are reactive -- they help students who come looking for help.

- *Financial aids would impact dropout rates.* However, we found very little effect traceable to financial aids, either in terms of type of aid, or in amounts.

Reading all the information again brings one to the conclusion that the most critical time to provide student support services is during that very hectic first four weeks of each semester.

Recommendations

A. That teachers be commended and reinforced in their efforts to:

- clearly lay out course activities and objectives;

- regularly evaluate student progress with quick feedback to students;

- individualize instruction;

- respond to student requests for help;

- take time to academically advise students throughout the semester.

No further changes are in order in this domain.

B. That there be installed a computerized system for identifying dropout-prone students at the end of registration, using biographical and class data.

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C. That there be installed a computerized system for teachers to flag students they think have dropped out in the first three weeks of class for immediate student services.

D. That counselors and/or instructors be assigned to a group of students identified as dropout-prone at the beginning of each semester, and that they devote a specific percent of their work day to this group.

E. That the counselors and instructors provide the targeted students with the traditional services of

- career decisions
- program planning
- class scheduling

F. That the assigned counselors/teachers take an active counseling attitude toward the target group, seeking the students out, scheduling follow up, creating an atmosphere where the student knows that he/she is in a program that is constantly moving him/her to longer-range planning and follow up.

G. That counselors/teachers assigned to the target group utilize group orientation activities similar to the ones used in the Kennedy-King Trio-funded Center for Student Development.

DANIEL J COFFEY
ASSOCIATES

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Comments

This Early Intervention Model is very simple. The most critical steps are:

1) To identify students early

2) To seek students out

3) To get students into an active support program

There is no reason to believe that counselors serving the target population need to adopt any extraordinary techniques unknown to Community College student service personnel for service delivery. The only noticeable change is that they must adopt a very active stance toward a limited group early in the semester, rather than attempt to react to the needs of any student who comes by.

In the future one would look toward a time when the early, active intervention can be more closely connected to course scheduling, so that targeted students might be put into a holding group with time to sort out their plans before starting class. Then they would sign up for all/some 12-week courses to fill out a well-balanced first semester program.

The possibility of providing intervention prior to registration has been considered and rejected for three reasons:

a) the target population does not show up at the college until registration (early registration persons are not dropout-prone);

b) the basic data that provides identification of the target group is available only after students have registered;

DANIEL J COFFEY ASSOCIATES

o) there could be a great deal of energy expended on students who never actually register at CYCC.

The greatest difficulty with providing services in the first three to four weeks of a semester is trying to find the manpower. Counselors are handling late registration. Teachers are busy getting classes started. The most pragmatic approach would be to coordinate such intervention services with 12-week teaching schedules, paying teachers on a per diem basis for needed services until the crunch of late registration has passed.

D. Sequence for Implementing Intervention Model

1. Basic Information on Computer

The model needs rapid information and reports from the SRS system. Without the computer, the process of narrowing down the original group and easily obtaining teacher information on additional persons cannot be done.

Working backwards (CPM fashion) from September, 1974 registration, one can identify the milestones in the process of preparing the SRS system:

	Completion Date
Computer identification of Target Population	9/24/76
Trial run on program	9/1/76
Program Development	8/20/76
Revision of Data Base	7/31/76
User Definition of Data Base Elements for Intervention and Other Uses	5/31/76
Decide to Use Intervention Technique	4/15/76
Start	4/1/76

There is no time to be lost if there is any hope of having computerized data sufficient to create a target population for Fall, 1976 registration. If these target dates cannot be met, the approach must be altered.

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2. Basic Information Paper Records

In addition to the computer, there will need to be a
set of paper records that record the history of services ren-
dered, plans made by the student, and follow up needed. This
is a fairly simple operation. It should be completed by August
30th; started *circa* August 1st.

3. Allocation of Resources

Although there should be some savings achieved through
conscious targeting of services to 1500 or so students, the
pragmatic approach is to plan on assigning new manpower to the
project.

It seems reasonable to hire faculty scheduled to teach
12-week courses to handle the drop-add process of late registra-
tion on an hourly fee basis. This would allow for flexible
scheduling to meet the peaks of business, and it would free the
counselors and other staff to begin the process of early inter-
vention on the target population.

Some plan for resource allocation needs to be approved by
April 15, 1976 if the basic information operation is to proceed
on schedule.

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APPENDIX A

HYPOTHESES AND DEFINITION OF DROPOUT

ATTRITION/RETENTION HYPOTHESES

Area	Sub-Area	Statement	Data	Data Source
1. Adm/Reg (not to be pursued)	General Adv. Contact	A complete filling out of admissions application form relates to intra/inter semester retention	-Forms completed -Retention key	Review of folders
2.	Major Decision-Making	Forcing a student to select a major (including option "undecided") at each registration relates to intra/inter semester retention.	-Major code -Advisor signature -Student statement -Retention key	SRS Reg. form Questionnaire SRS/Anal/Assign.
2a		Decision of major prior to first registration at CYCC relates to retention.	-Student statement of major pre-decided	Questionnaire
3	Major Advising/Decision-Making	Having students formally choose a major and set down an academic plan after one semester (14th week) or one year (8th week of second semester) relates to retention.	-Not happening; have to set up trial group randomly? -Anything similar happening? -Retention key	Special Services Past Coun. 101
4	Major Advising	Discussion of major/program with Admissions staff prior to first sem. at CYCC resulting from Admissions staff initiative relates to intra/inter semester retention.	-Student statement -Admissions Counselor statement -Retention key	Questionnaire Admissions folder

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	Area	Sub-Area	Statement	Data	Data Source
5	Adm/Reg	Major Advising	Student discussion of major/program selection with an advisor during registration relates to intra/inter sem. ret.	-Student statement -Advisor statement -Retention key	Questionnaire Reg. records
6			Student discussion of choice of major with a counselor/faculty member before registration relates to retention.	-Student statement -Retention key	Questionnaire (problem getting data)
7	Academics	Classroom Activities	Duration of course (16,12,8 weeks) relates to intra/inter semester retention.	-Course number -Retention key	SRS
8		(not to be pursued)	Use of learner-centered modules relates to intra/inter semester retention.	-Faculty techniques -Retention key	Fac. Questionnaire
9			Frequency of evaluations and grading policies (to be defined) relates to intra/inter semester retention.	-Faculty practices -Retention key	Fac. Questionnaire
10			Teacher clearly stating course activities/objectives at start of course relates to intra-semester retention of that course.	-Teacher objectives statement picture -Retention key	Fac. Questionnaire
11			Attendance policies/endorsement are related to inter/intra semester retention; requiring regular attendance (missing 3 or fewer classes of 16-week semester).	-Policies -Student policy -Retention key	Fac. Questionnaire Fac. Questionnaire
11a			Student ability to predict grades relates to retention.	-Student prediction	Questionnaire

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Area	Sub-Area	#	Statement	Data	Data Source
Academics	Classroom Activities	12	Class size of sections student enrolled in relates to intra/inter sem. retention.	-Number of persons registered -Retention key	SRS/Class reports
	Curriculum	13	Major chosen relates to intra/inter semester retention.	-Major codes -Retention key	SRS
		14	Mix of DI (all DI/DI reg./DI/Non-DI/pre-coll) relates to intra/inter sem. retention.	-Course registration -Retention key	SRS
		15	Mix of ELI (all ELI/ELI-Coll., etc.) relates to intra/inter semester retention.	-Course registration -Retention key	SRS
	Faculty Outside Class	16	Placement scores with proper (vs. improper) placement relates to intra/inter sem. retention.	-Place data -Registration -Interpretation? -Retention key	SRS? .Coun. Office .Int.Stud. Office
		17	Getting faculty advising at early registration relates to inter-sem. retention.	-Day registered -Person advising -Retention key	SRS Reg. records
		18	Personal faculty contact outside of class re: class activities relates to intra/inter semester retention.	-Number of contacts -Type of contacts -Retention key	Questionnaire Questionnaire

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#	Area	Sub-Area	Statement	Data	Data Source
19	Student Services	Counseling	Number of student contacts with a counselor in non-registration activities relates to intra/inter sem.	-Student statements -Counselor info -Retention rate	Questionnaire
19a			Is counseling active (seeks out students) or reactive (serves those who come)?		
20			Receiving Assessment Center services relates to intra/inter sem. retention.	-Names -Retention key	Assess. Center
21		(not to be pursued)	Calling students not early registering relates to inter-semester retention.		Paper record
22			Attending student orientation (needs defining) relates to Intra-semester retention.	-Orientation records? -Retention key	Paper Questionnaire
23		Foreign Students	Number of times foreign student counselor freely seeks out and gets contact with a foreign student for student class and work advising relates to intra/inter semester retention.	-Data? -Retention rate	Questionnaire
24		Trio General	Being recruited by Trio relates to intra/inter sem.	-Retention key	Questionnaire SRS
25		(unable to pursue)	Being in Special Services (Trio) program relates to intra/inter sem. retention.	-Trio code -Retention key	SRS (codes not used)

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	Area	Sub-Area	Statement	Data	Data Source
26	Student Services	Financial Aids	Being awarded work-study prior to first week of class relates to intra/inter sem. retention.	-Financial Aid Code -Retention key	SRS
27			Having an ISSC scholarship (before registration) relates to intra/inter sem. retention.	-Award/Date -Retention key	Paper data
28			Receiving ISSC after first week of class relates to intra/inter semester retention.	-Award/Date -Retention key	Paper data
29			Having work-study money run out toward end of semester (before final four weeks) relates to intra/inter sem. retention.	-Amounts/Date -Retention key	Financial Aids
30			Receiving at least part of financial aids in the form of a loan relates to intra/inter sem.	-Fin. Aids info -Retention key	SRS
31	External	Pre-CYCC Experiences	Having attended (not matter how successfully) a college for at least part of a semester previous to attending CYCC relates to intra/inter sem. retention.	-Attendance -Retention key	Questionnaire
32			Attending CYMCA High School relates to intra/inter sem. ret.	-Attend CY High School -Retention key	High School records/QQ
33			Student failure in college courses previous to CYCC registration relates to intra/inter sem. retention.	-Student performance -Retention key	Questionnaire

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	Area	Sub-Area	Statement	Data	Data Source
34	Exter-nal	Pre-CYCC Experi.	Attending Chicago public schools relates to intra/inter semester retention.	-High school attended -Retention key	Student QQ
			Attending parochial school		Questionnaire
35		Present	Family status (dependents, living w/parents, etc.) relates to intra/inter sem. retention.	-Family info -Retention key	Questionnaire
36			Registration address (location) relates to intra/inter.	-Address/zip -Retention key	SRS
37			Race code (race, ethnic, country) relates to intra/inter semester retention.	-Race code -Place of birth -Retention key	SRS SRS
38	Open Ended		Drop out of one course relates to total intra-semester drop out and to inter-sem. retention.	-Grade records -Retention key	SRS
39			Dividing drop outs into sub-classes will generate new causal hypotheses.		
40			Analyses of age, sex, race, semester started, major, etc. against retention key will raise new causal hypotheses.	-Personal data -Retention key	SRS

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OPERATIONAL DEFINITION OF INTER-SEMESTER DROP OUT

DO = Drop out   NDO = Non-Drop Out
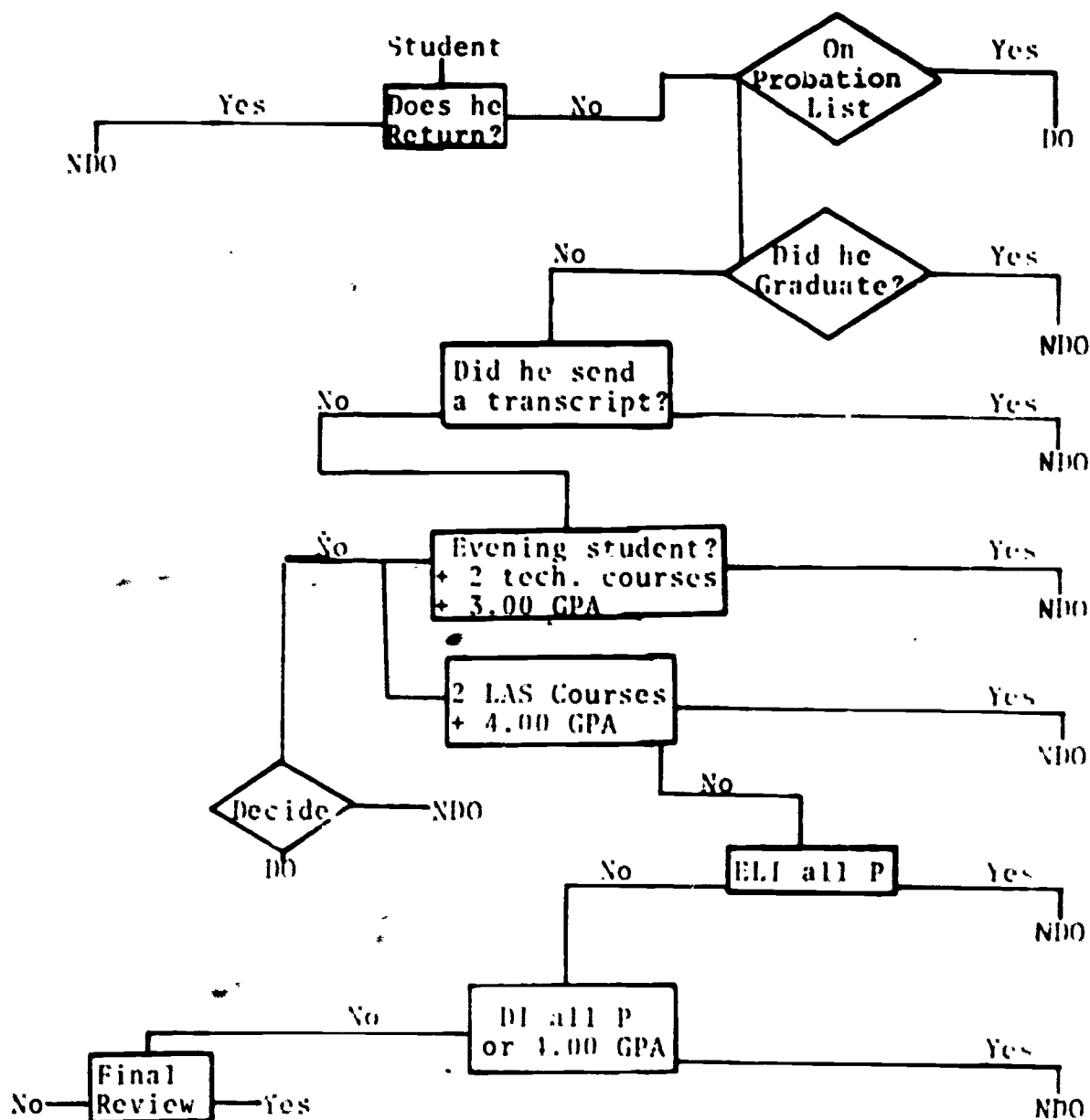
Intra-semester drop out: - Appears on Deficiency Report as dropping
                              in first week
                            - Stops coming to class in one of sample
                              classes

APPENDIX B

STUDENT QUESTIONNAIRE

Ⓘ (2-5)

1975 CYCC

STUDENT ATTITUDES QUESTIONNAIRE

Dear Student:

Please fill out the following information and then detach this page from the rest of the Questionnaire and hand it to your teacher. Ignore all numbers in parentheses ( ); they are used for computer coding.

_____

Student Name

_____   ___/___/___
Social Security Number   Month   Day   Year
(If you cannot recall,   Birth Date
skip this information.)
(6-14)

_____/_____/_____
Class   Course Number   Section
(15-17)   (18-20)   (21-23)

INSTRUCTIONS

All information you give in this Questionnaire will be held in strictest confidence. Your individual answers:

-- will not be seen by any instructor at Central;

-- will not be put into any of your College records

-- will not be made available to anyone in the College or outside the College.

Group answers will be the only information used for reports designed to help the College serve students better.

We need your honest, serious answers to these questions to help us improve Central Y College. Please take the time to answer all the questions as best you can. This questionnaire is to help us help you.

The more honest your answers are, the better we can serve you. Thank you for your help.

Almost all the questions have several answers. Please circle the item number that best expresses your answer to each questions. For example:

"Are you a student at Central YMCA College?"

(1.) Yes   2. No

Dan Coffey
Study Coordinator

1975 CYCC

STUDENT QUESTIONNAIRE

1. How definite are your <u>college</u> plans for the next three years?

    1. Very definite (I know exactly what I want to do).
    2. Fairly definite; I have a general plan.
    3. Not definite, but I think I am going forward.
    4. No plans beyond this semester in school.

    $\overline{(6)}$

2. How definite are your <u>job</u> plans for the next <u>five</u> years?

    1. Very definite (I know exactly what I want to do.
    2. Fairly definite; I have a general plan.
    3. Not definite, but I think I am going forward.
    4. No plans beyond this semester in school.

    $\overline{(7)}$

3. What major course of studies are you pursuing? (For example, Accounting, Mechanical Engineering, Liberal Arts, etc.)

    $\overline{(8-14)}$

    NOT MADE MIND
    UP = 9999

    _____
    ( ) I have not made up my mind yet.

4. What are your career (long-term work) goals?

    NOT MADE MIND
    UP = 99 (12-13)

    1. I have not made up my mind.
    2. My first choice is to become_____.
    3. My second choice is to become_____.

    1st $\overline{(12-13)}$
    2nd $\overline{(14-15)}$

5. How important do you think it is to choose a major area of study early in college?

    1. Very important.
    2. Fairly important.
    3. Of very little importance.
    4. Not important at all.

    $\overline{(16)}$

6. Did the person helping you to register <u>the first time</u> at Central encourage you to pick a <u>major field of study</u>?

    1. Yes, we discussed it at length.
    2. Yes, we discussed it, but not at length.
    3. The adviser said we had to put a number on the form, but we did not discuss the matter much.
    4. No, we did not discuss it at all.

    $\overline{(17)}$

5 t

7. Have you seriously discussed your education plans with your friends at Central?

<div style="margin-left:2em">

1. Yes   2. No

</div>

If yes, how strongly did their ideas influence your plans?

<div style="margin-left:2em">

1. Very strongly.
2. Strongly.
3. Very little.
4. Not at all.

</div>

8. Looking back to your first college registration (whether at Central or some other college), do you wish a teacher or counselor would have encouraged you more to choose a major area of study? Choose the answer that best expresses your feelings:

<div style="margin-left:2em">

1. Yes, it would have helped me a lot.
2. Yes, it would have helped some, but I have not suffered for not choosing.
3. No, I had already made up my own mind.
4. No, I don't think choosing a major would have helped me much.

</div>

9. When did you decide on the major area of study you have chosen?

<div style="margin-left:2em">

1. I decided before I came to Central.
2. I decided after arriving at Central.
3. I have not made a decision yet.

</div>

10. Who helped you most to pick your major area of study?

<div style="margin-left:2em">

1. I have not decided on one yet.
2. Myself.
3. Parents or family.
4. Friends in high school or college.
5. Counselor or teacher in high school.
6. Admissions counselor at a college other than Central.
7. Someone from CYCC. Who?_____
8. Other:_____

</div>

(18)

(19)

(20)

(21)

(22)

WHO

(23-24)

55

(2)

11. Why are you taking courses at Central? (Circle the one that best expresses your position.)

1. To learn English and then transfer.
2. To transfer to another college after one or two semesters.
3. To get an AA degree at Central and then transfer to another college.
4. To get a job after taking present courses.
5. To help me get ahead at work.
6. To give me a particular skill I need for work I am doing now.
7. To give me a particular skill for a career I plan to pursue.
8. Because I wanted to get a certain certificate.
9. Because I wanted to get a work-study job.

(25)

12. Do you have any plan (schedule) for what courses you want to take each semester?

1. Yes, I have a very specific schedule.
2. Yes, I have some general ideas.
3. No, I have no plans.

(26)

13. Before starting classes at Central, did you have any contacts with the Admissions counselors or recruiters?

1. Yes   2. No

(27)

If yes, do you remember the Admissions office person's name?

1. No   2. Yes, the name was:

_____

(28)

(29-30)

14. Did you discuss your college plans with anyone during the last registration?

1. Yes   2. No

(31)

If yes, with whom?

1. My advisor in his/her office.
2. The person who helped me schedule my classes during registration.
3. Other:_____

(32)

OTHER

(33-34)

15. Did you discuss your academic major with a faculty member or counselor during this last registration (Fall, 1975) at Central?

1. Yes, we discussed it.
2. We just decided what number to put down.
3. No, we did not discuss my major; we just got my schedule arranged.

(35)

16. How do you choose what courses to take each semester?

    1. I decide for myself what I want to take.
    2. I take whatever the advisor tells me to take during registration.
    3. I work out a plan with a teacher before registration and then try to get the courses I want.
    4. I work out a plan with my friends.
    5. Other: _____

17. Has the teacher of this course made any attempt to fit the course to your needs?

    1. Yes   2. No

    If yes, what has the teacher done? _____

    _____

Have you talked to the instructor of your needs? (That is, time conflicts, how fast your can go, need for tutoring outside of class, etc.).

    1. No   2. Yes

    If yes, was the teacher able to help you?

    1. Yes   2. No

18. How often do you have a quiz, test, or paper due in this class?

    1. Every time we meet.
    2. About once a week.
    3. About once every two weeks.
    4. About once a month.
    5. At mid-term only.
    6. I don't know; we have not had any tests or papers so far this semester.

19. Do you receive graded homework or tests back in this course?

    1. Yes   2. No

20. How fast do you usually get graded tests or papers back in this class?

    1. We haven't had any.
    2. One day.
    3. One week.
    4. Two weeks.
    5. More than two weeks.

(36)

(37)

(38-39)

(40)

(41)

(42)

(43)

(44)

57

(4)

21. Do you understand hor your instructor is grading
    you for this course?

      1. Yes, very clearly.
      2. Yes, I have a general idea.
      3. I have some ideas, but am not sure.
      4. I don't understand the grading process.
      5. There are no grades for this course.
         Either I pass or I repeat.

$\overline{(45)}$

22. How tough do you think the teacher grades in this
    course? How would you rate the grading of this
    course compared to others at Central?

      1. Very tough
      2. Fairly tough.
      3. Fairly easy.
      4. Very easy.

$\overline{(46)}$

23. Did the teacher give you an outline of the course
    material, in writing, at the beginning of this
    course?

      1. Yes   2. No

$\overline{(47)}$

24. Did the teacher of this course explain at the first
    or second session what would happen throughout the
    semester?

      1. Yes, very clearly.
      2. Yes, but I did not understand the explana-
         tion.
      3. No, I don't recall any explanations.
      4. I don't know; I started the course after
         the first classes.

$\overline{(48)}$

25. Do you know exactly what the teacher demands in this
    course to pass?

      1. Yes, very sure.
      2. Yes, fairly sure.
      3. Have some idea.
      4. Not sure at all.

$\overline{(49)}$

26. Is the teacher in this course sticking to his/her
    original outline of what would be done?

      1. Yes   2. No   3. I don't know.

      If no, how has the teacher changed?_____

$\overline{5\bullet}$

$\overline{(51\text{-}53)}$

58

27. Did the teacher of this course spell out what you have to do to get a D, to get a C, to get a B, an A?

    1. Yes, very clearly.
    2. Yes, fairly clearly.
    3. Yes, in general terms.
    4. No, not that I know of.

28. Do you have to come to class every session to keep up with the material?

    1. Yes, very definitely.
    2. Yes, I think you do?
    3. No, I don't think it makes much difference.
    4. No, you can definitely keep up without coming to every class.

29. Does the instructor require you to come to every class?

    1. Yes, very definitely.
    2. Teacher says we have to come, but lets us skip some sessions.
    3. Teacher wants us to come, but does not require that we come.
    4. Teacher does not seem to care much about attendance.

30. Do you think missing classes in this course would hurt your grade?

    1. Yes, the teacher has made that clear.
    2. Yes, I think so.
    3. Not sure.
    4. No.

31. How would you rate the attendance requirements for this course compared to other courses at Central?

    1. Much tougher.
    2. A bit tougher.
    3. Somewhat easier.
    4. Much easier.

32. How many class sessions have you missed for this course?

    1. None
    2. One
    3. Two to four
    4. Five to six
    5. Seven to ten
    6. More than ten

(6)

33. For this course I think I will get a grade of:

    1. A
    2. B
    3. C
    4. D
    5. F
    6. N
    7. R
    8. I have no idea what grade I will get for
        this course.

(60)

34. If you put a grade down on the previous question,
how do you know what grade you will get in this
course?

    1. I just guessed.
    2. The teacher has discussed it with me on
        the basis of the work I have done.
    3. The grade is tied to certain projects or
        work and I know how much work I will do.
    4. Heresay from my friends about what grade
        most students get.
    5. Other:_____

(61)

35. If you complete this course, which of the following
will be the primary reason why?

    1. The teacher.
    2. The subject matter is so interesting.
    3. The course is required for me to graduate
        or transfer.
    4. The course relates to my work and career
        and I need it.

(62)

36. If you do not complete this course, which of the
following will be the primary reason why?

    1. Personal reasons.
    2. Money problems.
    3. The fact that I am not doing well in this
        course.
    4. The subject matter is just not interesting.
    5. The teacher.

(63)

37. How many students usually come to class in this
course?

    1. 1 to 5.   4. 16 to 20.
    2. 6 to 10.   5. 21 to 25.
    3. 11 to 15.   6. 26 or more.

(64)

60

38. When did you register for this course?

    1. At early registration (last spring or
       during the summer).
    2. At the regular registration in September.
    3. During late registration in September.

If you registered at early registration, did you
spend much time discussing your overall program
plans of study with your advisor?

    1. Yes, we talked for some time.
    2. Yes, a very short time.

    3. No, we did not discuss my plans.

39. Have you ever talked with the teacher of this
course outside of class?

    1. Yes, once.
    2. Yes, two or three times.

    3. Yes, more than three times.
    4. No, not at all.

40. Have you ever discussed your major area of studies
with the teacher of <u>this</u> <u>class</u>?

    1. Yes, once.
    2. Yes, two or three times.

    3. Yes, more than three times.
    4. No, we've never discussed my major.

41. Have you discussed it with any teacher at Central?

    1. Yes, once.
    2. Yes, two or three times.

    3. Yes, more than three times.
    4. No.

42. Have you ever discussed course scheduling with the
teacher of this course?

    1. Yes, once.
    2. Yes, two or three times.

    3. Yes, more than three times.
    4. No, we've never discussed course scheduling.

43. Has the teacher of this course ever asked to see you
outside of class about class matters?

    1. Yes, once.
    2. Yes, two or three times.

    3. Yes, more than three times.
    4. No, not at all.

44. Have you ever gone to the teacher <u>during office</u> <u>hours</u> to discuss problems related <u>to this course</u>?

    1. Yes, once.
    2. Yes, two or three times.
    3. Yes, more than three times.
    4. No.

$\overline{(72)}$

Questions 45 through 48 are for U.S.A. students only:

45. Have you ever gone to the 9th floor (counseling offices) to discuss personal problems?

    1. Yes, once.
    2. Yes, two or three times.
    3. Yes, more than three times.
    4. No.

$\overline{(73)}$

46. Have you discussed any of your personal problems with any instructor?

    1. Yes, once.
    2. Yes, two or three times.
    3. Yes, more than three times.
    4. No.

$\overline{(74)}$

47. Have you talked with any counselors from the 9th floor after completing your registration and drop/adds this semester?

    1. Yes, once.
    2. Yes, two or three times.
    3. Yes, more than three times.
    4. No.

$\overline{(75)}$

48. Did any of the following groups help you to get into college? Circle the number of <u>each</u> <u>one</u> that helped you.

    1. Set-Go Assessment Center.
    2. Seven Nations.
    3. Set-Go Latino.
    4. Quetzalcoatl.
    5. None of these groups.

1 = CIRCLED
BLANK = NOT CIRCLED

$\overline{(76)}$
$\overline{(77)}$
$\overline{(78)}$
$\overline{(79)}$
$\overline{(80)}$

Questions 49 through 52 are for International students only.

49. Have you ever talked to anyone in the foreign student advisor's office on matters not related to visa status ot visa work permits?

    1. Yes, once.
    2. Yes, two or three times.
    3. Yes, more than three times.
    4. No.

③ $\underline{\text{I.D.}}$
$\overline{(1-5)}$

$\overline{(6)}$

62

50. Have you ever been called in by a counselor or foreign student advisor to discuss your class attendance or performance?

      1. Yes, once.
      2. Yes, more than once.
      3. No.

51. Have you ever gone to a foreign student advisor to talk about class attendance or performance?

      1. Yes, once.
      2. Yes, more than once.
      3. No.

    If yes, were you satisfied with the outcome of the meeting?

      1. Yes   2. No

52. Has the foreign student advisor's office ever asked you to come in for a visit not reglated to registration visa matters?

      1. Yes, once.
      2. Yes, more than once.
      3. No, not that I can remember.

For all students:

53. Did you attend the student orientation in your first semester at Central?

      1. Yes.
      2. No. I knew about it, but decided not to go.
      3. No, I didn't know there was a student orientation.
      4. There was no orientation during my first semester.

54. What colleges did you attend before Central?

Name of College	When(Year)	How Many Terms

63

55. How well did you do at the colleges you attended before Central?

    1. Very well; A's and B's.
    2. Well enough; B's and C's.
    3. Not too well; C's and D's.
    4. Poorly; I was dropping out or very close to dropping out.

    30

56. Have you ever had to drop a college course for academic reasons, at a <u>college</u> <u>other</u> <u>than</u> CYCC?

    1. Yes   2. No

    31

    If yes, what was the name of the college?

    _____

    (32-33)

57. Rate the importance of each of the following to your decision to come to Central:

    a) Friends:

       1. Very important.
       2. Important.
       3. Of little importance.
       4. Had no bearing.

       (34)

    b) High school counselor or teacher:

       1. Very important.
       2. Important.
       3. Of little importance.
       4. Had no bearing.

       (35)

    c) Parents or relatives:

       1. Very important.
       2. Important.
       3. Of little importance.
       4. Had no bearing.

       (36)

    d) Could not get into any other school:

       1. Very important.
       2. Important.
       3. Of little importance.
       4. Had no bearing.

       (37)

    e) The financial aid package was better at Central than at other schools:

       1. Very important.
       2. Important.
       3. Of little importance.
       4. Had no bearing.

       (38)

(11)

f) I never considered any other schools:

    1. Very important.
    2. Important.
    3. Of little importance.
    4. Had no bearing.

g) I was impressed with the CYCC recruiter:

    1. Very important.
    2. Important.
    3. Of little importance.
    4. Had no bearing.

h) I knew a teacher at Central I liked:

    1. Very important.
    2. Important.
    3. Of little importance.
    4. Had no bearing.

i) Other:_____

    1. Very important.
    2. Important.
    3. Of little importance.
    4. Had no bearing.

58. Have you graduated from high school?

    1. Yes, with diploma. _____/_____
                   month   year

    2. Yes, with GED. _____/_____
                    month   year

    3. No.

59. If you have not graduated from high school or
gotten a GED, are you now enrolled in a program
to get a GED?

    1. Yes.   2. No.

    If yes, when do you expect to take the GED
    exam: _____/_____
            month   year

60. What high schools in the Chicago area have you
attended: 1. None

Name	Year

6 5

(12)

61. Indicate what high school you attended last:

_____   _____   _____
        name   city   year

62. In addition to yourself, you are responsible for
    the financial support of how many people?

    1. No other.
    2. One person.
    3. Two persons.
    4. Three persons.
    5. Four or more.

63. Have you thought of quitting Central this semester?

    1. Yes   2. No

    If yes, why did you think of quitting? _____
    _____
    _____

    What has made you stay?_____
    _____
    _____

64. How many hours a week of paid employment does your
    job involve?

    1. I have no job.
    2. 1-10 hours per week.
    3. 11-20 hours per week.
    4. 21-40 hours per week.
    5. Over 40 hours per week.

66

(13)

APPENDIX C

FACULTY QUESTIONNAIRE

ABOUT THIS QUESTIONNAIRE

1. Individual instructor information from this questionnaire will be kept strictly confidential. Only group aggregate information will be used in the study analysis.

2. <u>Please</u> answer the factual questions from the perspective of *what actually happens*, even if this differs from the way you think things *should be*.

3. There are four parts to <u>Form A</u>:

   -- Basic Instructor Information

   -- Registration Advising Questions

   -- Non-registration Advising Questions

   -- Classroom Procedure Questions

   There are only two parts to Questionnaire <u>Form B</u> (which will be used when one instructor is given more than one questionnaire to fill out):

   -- Basic Instructor Information

   -- Classroom Procedure Questions

4. Please fill out the Questionnaire right now, put into the envelope, seal, and drop it off at the Security Desk.

5. THANK YOU. Any questions, please call:

   Dan Coffey   728-3333 (day)
   761-3603 (evening)

ATTRITION/RETENTION STUDY

CENTRAL YMCA COMMUNITY COLLEGE
FACULTY QUESTIONNAIRE 11/75

FORM B   Pages 1,8,9,10,11

NOTES: 1. Unless instructed to do otherwise, circle only one answer.

E.g., "Are you a CYCC instructor?"

(1.) Yes   2. No

2. Some questions may seem to repeat previous items. They do not. Please read each item carefully to pick up the differences.

3. Since the sample has been set up on the basis of class sections, a few faculty members will be asked to fill out two questionnaires. Please note that only the questions referring to classroom procedures are repeated on the second questionnaire.

Answer each questionnaire based on what you are actually doing for the class section noted at the top of the first page of each questionnaire.

BASIC INFORMATION

a. Instructor status: 1. Fulltime   2. Part time   (4)

b. Number of years teaching at CYCC: _____   (12-13)
    (Count 1975-76 as year one.)   years

c. Sex: 1. Female   2. Male   (14)

d   Year of Birth;   _____   (15-16)
                          year

e. Highest degree achieved:

                          1. BS/BA
                          2. MS/MA
                          3. Ed.D./Ph.D.   (17)

f. Are you still working to complete a degree yourself?

                    -1. Yes   2. No   (18)

FORM B CODE   4
(19)

(1)

ATTRITION/RETENTION STUDY

CENTRAL YMCA COMMUNITY COLLEGE
FACULTY QUESTIONNAIRE 11/75

FORM A - _FULL QUESTIONNAIRE_

NOTES: 1.   Unless instructed to do. otherwise, circle only one answer.

E.g., "Are you a CYCC instructor?"

(1.) Yes   2. No

2.   Some questions may seem to repeat previous items. They do not. Please read each item carefully to pick up the differences.

3.   Since the sample has been set up on the basis of class sections, a few faculty members will be asked to fill out two questionnaires. Please note that only the questions referring to classroom procedures are repeated on the second questionnaire.

Answer each questionnaire based on what you are actually doing for the class section noted at the top of the first page of each questionnaire.

- -

BASIC INFORMATION

a.   Instructor status: 1. Fulltime   2. Part time   __11__

b.   Number of years teaching at CYCC: _____
years   (12-13)
(Count 1975-76 as year one.)

c.   Sex: 1. Female   2. Male   (14)

d.   Year of Birth: _____
year   (15-16)

e.   Highest degree achieved:

1. BS/BA
2. MS/MA
3. Ed.D./Ph.D.   (17)

f.   Are you still working to complete a degree yourself?

1. Yes   2. No   (18)

70

(1)

I. REGISTRATION ADVISING QUESTIONS

1. Have you ever worked as an academic advisor at one
of the CYCC registrations?

       1. Yes   2. No

                                                  (19)

If no, go directly to Section II of Questionnaire.

2. How useful are the student advisor folders for
scheduling courses for NEW students? *(New student:
First time at CYCC, whether the person be coming
from high school or another college.)*

       1. Very useful.
       2. Fairly useful.
       3. Not very useful.   20,
       4. Not useful at all.
       5. Folders are useful, but seldom available.

3. How useful are the student advisor folders for
scheduling courses for CONTINUING students?
*(Continuing student: one who has studied at
CYCC before.)*

       1. Very useful.
       2. Fairly useful.
       3. Not very useful.   (21)
       4. Not useful at all.
       5. Folders are useful, but seldom available.

4. During the first two days of regular registration, do
you have time to discuss more than the current semes-
ter scheduling problems?

    1. I have never worked during the first two days
       of registration.

                                                22.

    2. Yes, I had time to discuss more with most of
       the students.

    3. Yes, I had time to discuss more with some
       students.

    4. No, I had no time to do more than schedule
       class for the current semester.

5. During regular registration, AFTER the first two
   days, do you have time to discuss more than the
   current scheduling problems?

   1. I have never worked at regular registration
        after the first two days.
   2. Yes, I had time to discuss more with **most** of
        the students.
   3. Yes, I had time to discuss more with **some**
        students.
   4. No, I had no time to do more than schedule
        class for the current semester.

   ~~23~~

6. During **any** registration, **when** you have the time,
   what do you actually discuss with FULL TIME stu-
   dents (taking 12 hours or more)?

   (CIRCLE **ALL** THE ANSWERS **THAT** APPLY.)

   1. Current semester schedule.
   2. Financial aids package the student has.
   3. Transfer plans.
   4. Career choice.
   5. Academic major at Central.
   6. Academic major in general.
   7. Job plans for current semester.
   8. Kinds of teaching student wants.
   9. Other:_____

7. What services, besides scheduling, do FULL TIME
   students usually need when they register?

   _____
   _____
   _____

8. Do you try to get students you advise to settle on an
   academic major or program early in their career at
   Central?   1. Yes   2. No

   Why/why not? _____
   _____

9. Do many students **you** advise during registration come
   to CYCC with a clear idea of what their academic major
   or program of studies is to be?

   1. Almost all do.
   2. The majority do.
   3. A minority do.
   4. Very few do.

72

10. How much time (give your best guess) do you usually spend during the various registration periods helping *students who have not yet chosen an academic major* try to settle on a major or program study plan?

    a) During Early Registration:

       1. I have not worked during early registration.
       2. Quite a lot of time (over 15 minutes).
       3. A fair amount of time (5-15 minutes).
       4. Some time (5 minutes or so).
       5. No time.

                                                              (43)

    b) During the first two days of regular registration:

       1. I have not worked during the first two days.
       2. Quite a lot of time (over 15 minutes).
       3. A fair amount of time (5-15 minutes).
       4. Some time (5 minutes or so).
       5. No time.

                                                              (44)

    c) During regular registration, AFTER the first two days:

       1. I have not worked after the first two days.
       2. Quite a lot of time (over 15 minutes).
       3. A fair amount of time (5-15 minutes).
       4. Some time (5 minutes or so).
       5. No time.

                                                              (45)

    d) During late registration (after classes start):

       1. I have not worked during late registration.
       2. Quite a lot of time (over 15 minutes).
       3. A fair amount of time (5-15 minutes).
       4. Some time (5 minutes or so).
       5. No time.

                                                              (46)

    e) During the "12-week course" registration period:

       1. I have not worked during this registration.
       2. Quite a lot of time (over 15 minutes).
       3. A fair amount of time (5-15 minutes).
       4. Some time (5 minutes or so).
       5. No time.

                                                              (47)

11. How well are the current major (program) codes used at CYCC functioning?

       1. Very well; no problems.
       2. Pretty well; just a few problems.
       3. Not very well; many problems.
       4. Not well at all; problems with most of the students I advise.

                                                              (48)

73

(4)

12. Do you understand how the CYCC Major Codes work?

    1. Yes
    2. Not sure
    3. No

<div style="text-align: right">(49)</div>

13. Do students understand the CYCC Major Codes?

    1. Almost all students do.
    2. Most students do.
    3. Only a minority of students do.
    4. Very few students do.

<div style="text-align: right">(50)</div>

14. Please rate each of the four registrations from the viewpoint: "Is there enough time to do an adequate job of advising students?"

(Note: Use your own definition of "adequate job.")

a) Early Registration:

    1. I have never worked as an advisor at early registration.
    2. There is enough time to give all students adequate advising.
    3. Enough time to give most students adequate advising.
    4. Enough time to give the minority of students adequate advising.
    5. Not enough time to give any students adequate advising.

<div style="text-align: right">(51)</div>

b) Regular Registration, First Two Days:

    1. I have never worked as an advisor during the first two days.
    2. There is enough time to give all students adequate advising.
    3. Enough time to give most students adequate advising.
    4. Enough time to give the minority of students adequate advising.
    5. Not enough time to give any students adequate advising.

<div style="text-align: right">(52)</div>

c) Regular Registration, After first Two Days:

    1. I have never worked as an advisor during this time.
    2. There is enough time to give all students adequate advising.
    3. Enough time to give most students adequate advising.
    4. Enough time to give the minority of students adequate advising.
    5. Not enough time to give any students adequate advising.

<div style="text-align: right">(53)</div>

<div style="text-align: center">(5)</div>

d) Late Registration; After Classes Start:

1. I have never worked as an advisor during
      late registration.
2. There is enough time to give __all__ students
      adequate advising.
3. Enough time to give __most__ students adequate
      advising.
4. Enough time to give the __minority__ of students
      adequate advising.
5. __Not enough time__ to give any students adequate
      advising.

e) Special 12-week Course Registration:

1. I have never worked as an advisor during
      this registration.
2. There is enough time to give __all__ students
      adequate advising.
3. Enough time to give __most__ students adequate
      advising.
4. Enough time to give the __minority__ of students
      adequate advising.
5. __Not enough time__ to give any students adequate
      advising.

15. For various registrations related to Fall 1975
classes, how many total hours did you work?

1. Early registration, including last spring:
                                        _____ hours

2. Regular registration: _____ hours

3. Late registration: _____ hours

4. 12-week Course registration: _____ hours

II. ACADEMIC ADVISING OUTSIDE REGISTRATION

1. __How many students__ have you advised so far this
semester regarding their __class scheduling__, outside
of the times you were working at a registration?

1. None   4. 21-30
2. 1-10   5. 31-50
3. 11-20   6. More than 50

2. How many students have you advised (outside of regis-
tration) so far this semester regarding their __acade-
mic major__ or __program__ of studies?

1. None   4. 21-30
2. 1-10   5. 31-50
3. 11-20   6. More than 50

3. How many students (give your best guess) that you
    have advised this semester (scheduling or otherwise)
    outside of registration times have a clear idea of
    what their academic major is to be?

         1. None   4. 21-30
         2. 1-10   5. 31-50
         3. 11-20   6. More than 50

4. Do you think it is important for students coming to
    CYCC to choose an academic major or program early
    in their college career?

         1. Very important.
         2. Fairly important.
         3. Of little importance.
         4. Not very important at all.
         5. All of the above; it depends on each student.

(46)

(47)

III. CLASSROOM PROCEDURES

(Note: Answer for what you do in this course section only.)

1. How often do you give specific homework assignments?

    1. Every class.
    2. About once or twice a week.
    3. About once every two weeks.
    4. About once a month.
    5. Hardly ever.
    6. Never.

(11)

2. How often do you have tests or quizzes in this class?

    1. Every class.
    2. About once or twice a week.
    3. About once every two weeks.
    4. About once a month.
    5. Hardly ever.
    6. Never.

(12)

3. What percent of the homework is graded (or has written comments) and returned to the students before the last week of the semester?

    1. 90% or more.
    2. 50-80%
    3. 25-50%
    4. 5-25%
    5. None

(13)

4. How quickly do you return graded (or commented on) homework assignments?

    1. At the next class after collecting it.
    2. Within a week after collecting it.
    3. Within two weeks after collecting it.
    4. Within a month after collecting it.
    5. Toward the end of the semester.

(14)

5. How quickly do you return graded tests or quizzes done in class?

    1. At the next class.
    2. Within a week.
    3. Within two weeks.
    4. Within a month.
    5. Toward the end of the semester.

(15)

77

6. Did you tell the students how much work they would have to do to get an A, B, C, etc.?

    1. Yes, very specifically.
    2. Yes, fairly specifically.
    3. Yes, I made general statements.
    4. No, I did not.
    5. This course has no grades so I did not have anything to tell them.

7. Did you give this information to the class in writing?

    1. Yes   2. No

8. Do you think the students understood what you were telling them about how much work they would have to do?

    1. Yes
    2. I'm not sure
    3. No

9. Did you relate specific assignments or kinds of work to specific grades in this course?

    1. Yes, very specifically.
    2. Yes, fairly specifically.
    3. Yes, I made general statements.
    4. No, I did not.
    5. This course has no grades so I did not have anything to tell them.

10. Did you give the information from #9 in writing?

    1. Yes   2. No

11. Do you think the students understood what you were telling them about what assignments related to grades?

    1. Yes
    2. I'm not sure
    3. No

12. Did you tell the students of this course what skills or information they themselves should possess by the end of this course?

    1. I told them exactly.
    2. I told them fairly specifically.
    3. I gave them some general notions.
    4. No, I did not tell them what skills or knowledge they should possess at the end of this course.

78

13. Did you give the students a written outline of what was to happen at each class session?

        1. Yes   2. No

14. What is your attendance policy in this course?

_____

_____

15. What do you do when students break this policy?

_____

_____

16. Did you explain your attendance policy at the beginning of this course?

        1. Yes, in writing.
        2. Yes, orally but clearly.
        3. Yes, generally.
        4. No.

17. Do you consider it your responsibility to keep track of the attendance in this course?

        1. No   2. Yes   Why?_____

_____

18. According to your most accurate notion, how many students were registered for the first week of class?
                                 Number: _____

19. According to your most accurate notion, how many students are still enrolled in this class?
                                 Number: _____

20. How many students in this course, do you think, lack the skills to do well (get at least a C)?
                                 Number: _____

21. How many students generally show up for class?
                                 Number: _____

22. How many students are still probably registered for this course but have stopped coming to class?
                                 Number: _____

23. How many students from this class have you taken time to help right before or after the class time?
                                 Number: _____

24. How many students from this class have you asked to come to you outside of class time for advising or tutoring?   Number: _____

25. What is your opinion about how well the CYCC English Placement system has worked for Fall, 1975? (Choose only one option.)

    1. I have no idea; it does not affect my students.
    2. Very well; most students are being properly placed.
    3. Fairly well; students are generally being properly placed.
    4. Poorly; few students are being properly placed.
    5. I don't know how well students are being placed, but I think the system is working well.
    6. I don't know how well students are being placed, but I think the system is working poorly.

(48)

26. What is your opinion about how well the Math Place-ment system, provided by the Counseling Department, has worked for Fall, 1975?

    1. I have no idea; it does not affect my students.
    2. Very well; most students are being properly placed.
    3. Fairly well; students are generally being properly placed.
    4. Poorly; few students are being properly placed.
    5. I don't know how well students are being placed, but I think the system is working well.
    6. I don't know how well students are being placed, but I think the system is working poorly.

(49)

27. We are interested in your comments on:

    1. "What is a drop out at CYCC?"
    2. "Why do students drop out at CYCC?"

What (50-57)

Why (58-65,

80

APPENDIX D

PRINT-OUT PACKETS *

1) SRS Time Delay Comparisons

2) Deficiency Study

3) Student Questionnaire Results

4) Faculty Questionnaire Results

5) Drop Out Data Analysis

6) Personnel Signing Registration Forms

*These are available for inspection at:

Office of Institutional Research
Central YMCA Community College
211 W. Wacker
Chicago, Il   60606
(312) 222-8325

APPENDIX E

MAJOR CODES BY STUDENT-REPORTED MAJOR CODES

```
                QMAJOR
        COUNT  I
        ROW PCT I        LAS        SECR       ENG      REAL EST  BUS
        COL PCT I
        TOT PCT I     0I     1.I      2.I      3.I      4.I      5.
MAJOR   --------I-------I--------I--------I--------I--------I--------
        0   I     0  I    1  I    0  I    0  I    0  I    0
            I     0  I 100.0 I    0  I    0  I    0  I    0
            I     0  I   .7  I    0  I    0  I    0  I    0
            I     0  I   .1  I    0  I    0  I    0  I    0
        ----I-------I--------I--------I--------I--------I--------
        1.  I     1  I   23  I    1  I    2  I    0  I    0
LAS         I    2.0 I  45.1 I   2.0 I   3.9 I    0  I    0
            I    5.9 I  16.1 I   2.0 I   2.9 I    0  I    0
            I    .1  I   3.2 I   .1  I   .3  I    0  I    0
        ----I-------I--------I--------I--------I--------I--------
        2.  I     1  I    4  I   27  I    0  I    0  I    1
SECR        I    2.5 I  10.0 I  67.5 I    0  I    0  I   2.5
            I    5.9 I   2.8 I  52.9 I    0  I    0  I   1.1
            I    .1  I   .6  I   3.8 I    0  I    0  I   .1
        ----I-------I--------I--------I--------I--------I--------
        3.  I     1  I    3  I    3  I   29  I    0  I    4
ENG         I    2.3 I   6.8 I   6.8 I  65.9 I    0  I   9.1
            I    5.9 I   2.1 I   5.9 I  41.4 I    0  I   4.5
            I    .1  I   .4  I   .4  I   4.1 I    0  I   .6
        ----I-------I--------I--------I--------I--------I--------
        5.  I     3  I    0  I    0  I    1  I    0  I   19
BUSINESS    I   11.1 I    0  I    0  I   3.7 I    0  I  70.4
            I   17.6 I    0  I    0  I   1.4 I    0  I  21.3
            I    .4  I    0  I    0  I   .1  I    0  I   2.7
        ----I-------I--------I--------I--------I--------I--------
        6.  I     1  I   11  I    3  I    1  I    0  I    2
ALLIED      I    1.1 I  11.8 I   3.2 I   1.1 I    0  I   2.2
            I    5.9 I   7.7 I   5.9 I   1.4 I    0  I   2.2
            I    .1  I   1.5 I   .4  I   .1  I    0  I   .3
        ----I-------I--------I--------I--------I--------I--------
        7.  I     3  I    3  I    0  I    0  I    0  I    0
COMMU SERV  I   10.3 I  10.3 I    0  I    0  I    0  I    0
            I   17.6 I   2.1 I    0  I    0  I    0  I    0
            I    .4  I   .4  I    0  I    0  I    0  I    0
        ----I-------I--------I--------I--------I--------I--------
        10. I     3  I   29  I    5  I    9  I    1  I   19
UNSPECIFIED I    2.0 I  19.7 I   3.4 I   6.1 I   .7  I  12.9
            I   17.6 I  20.3 I   9.8 I  12.9 I  25.0 I  21.3
            I    .4  I   4.1 I   .7  I   1.3 I   .1  I   2.7
        ----I-------I--------I--------I--------I--------I--------
        COLUMN   17      143      51       70       4       89
        TOTAL   2.4     20.1     7.2      9.9      .6      12.5
(CONTINUED)
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	COUNT ROW PCT COL PCT TOT PCT	ALLIED	COMM SER V	UNSPEC	LAS UNSP EC	HOLDING	GED	ROW TOTAL
		6.1	7.1	10.1	20.1	98.1	99.1	
MAJOR								
	0	0	0	0	0	0	0	1, .1
		0	0	0	0	0	0	
		0	0	0	0	0	0	
		0	0	0	0	0	0	
LAS	1.	0	2	0	17	0	5	51 7.2
		0	3.9	0	33.3	0	9.8	
		0	6.1	0	21.0	0	6.5	
		0	.3	0	2.4	0	.7	
SECR	2.	4	0	0	1	0	2	40 5.6
		10.0	0	0	2.5	0	5.0	
		2.9	0	0	1.2	0	2.6	
		.6	0	0	~1	0	.3	
ENG	3.	0	0	1	0	0	3	44 6.2
		0	0	2.3	0	0	6.8	
		0	0	33.3	0	0	3.9	
		0	0	.1	0	0	.4	
BUSINESS	5.	2	0	0	0	0	2	27 3.8
		7.4	0	0	0	0	7.4	
		1.4	0	0	0	0	2.6	
		.3	0	0	0	0	.3	
ALLIED	6.	59	5	1	5	0	5	93 13.1
		63.4	5.4	1.1	5.4	0	5.4	
		42.1	15.2	33.3	6.2	0	6.5	
		8.3	.7	.1	.7	0	.7	
COMMU SERV	7.	2	15	0	5	0	1	29 4.1
		6.9	51.7	0	17.2	0	3.4	
		1.4	45.5	0	6.2	0	1.3	
		.3	2.1	0	.7	0	.1	
UNSPECIFIED	10.	42	6	0	15	0	18	147 20.7
		28.6	4.1	0	10.2	0	12.2	
		30.0	18.2	0	18.5	0	23.4	
		5.9	.8	0	2.1	0	2.5	
COLUMN TOTAL		140 19.7	33 4.6	3 .4	81 11.4	2 .3	77 10.8	710 100.0

(CONTINUED)

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                    .MAJOR
        COUNT   I
        ROW PCT I            LAS       SECR      ENG       REAL EST BUS
        COL PCT I
        TOT PCT I        0I        1.I       2.I       3.I       4.I        5.I
MAJOR   --------I--------I--------I--------I--------I--------I--------I
        13.     I    0   I    0   I    0   I    0   I    0   I    1   I
LEARN FOR LIVE   I    0   I    0   I    0   I    0   I    0   I  100.0 I
                 I    0   I    0   I    0   I    0   I    0   I   1.1  I
                 I    0   I    0   I    0   I    0   I    0   I   .1   I
        -I--------I--------I--------I--------I--------I--------I
        14.     I    0   I    0   I    0   I    0   I    0   I    1   I
SPECIAL          I    0   I    0   I    0   I    0   I    0   I  100.0 I
                 I    0   I    0   I    0   I    0   I    0   I   1.1  I
                 I    0   I    0   I    0   I    0   I    0   I   .1   I
        -I--------I--------I--------I--------I--------I--------I
        15.     I    0   I    1   I    0   I    0   I    0   I    0   I
                 I    0   I  100.0 I    0   I    0   I    0   I    0   I
                 I    0   I   .7   I    0   I    0   I    0   I    0   I
                 I    0   I   .1   I    0   I    0   I    0   I    0   I
        -I--------I--------I--------I--------I--------I--------I
        20.     I    2   I   52   I   10   I   23   I    2   I   31   I
LAS UNSPEC       I   1.0  I  24.9  I   4.8  I  11.0  I   1.0  I  14.8  I
                 I  11.8  I  36.4  I  19.6  I  32.9  I  50.0  I  34.8  I
                 I   .3   I   7.3  I   1.4  I   3.2  I   .3   I   4.4  I
        -I--------I--------I--------I--------I--------I--------I
        27.     I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
        -I--------I--------I--------I--------I--------I--------I
        34.     I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
        -I--------I--------I--------I--------I--------I--------I
        93.     I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
                 I    0   I    0   I    0   I    0   I    0   I    0   I
        -I--------I--------I--------I--------I--------I--------I
        96.     I    0   I    1   I    0   I    0   I    0   I    0   I
                 I    0   I  100.0 I    0   I    0   I    0   I    0   I
                 I    0   I   .7   I    0   I    0   I    0   I    0   I
                 I    0   I   .1   I    0   I    0   I    0   I    0   I
        -I--------I--------I--------I--------I--------I--------I
        COLUMN       17       143       51       70        4        89
        TOTAL        2.4      20.1      7.2      9.9       .6       12.5
(CONTINUED)
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COUNT ROW PCT COL PCT TOT PCT	ALLIED 5.I	COMM SER v 7.I	UNSPEC 10.I	LAS UNSP EC 20.I	HOLDING 98.I	GED 99.I	ROW TOTAL
13. LEARN FOR LIVE	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .1
14. SPECIAL	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .1
15.	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .1
20. LAS UNSPEC	29 13.9 20.7 4.1	5 2.4 15.2 .7	0 0 0 0	30 14.4 37.0 4.2	0 0 0 0	25 12.0 32.5 3.5	209 29.4
27.	1 100.0 .7 .1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .1
34.	0 0 0 0	0 0 0 0	1 100.0 33.3 .1	0 0 0 0	0 0 0 0	0 0 0 0	1 .1
93.	0 0 0 0	0 0 0 0	0 0 0 0	1 100.0 1.2 .1	0 0 0 0	0 0 0 0	1 .1
95.	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .1
COLUMN TOTAL	140 19.7	33 4.6	3 .4	81 11.4	2 .3	77 10.8	710 100.0

(CONTINUED)

	OMAJOR					
COUNT I ROW PCT I COL PCT I TOT PCT I	LAS 0I	SECR 1.I	ENG 2.I	3.I	REAL EST 4.I	BUS 5.I
MAJOR						
98. I HOLDING I I I	0 I 0 I 0 I 0 I	4 I 16.0 I 2.8 I .6 I	2 I 8.0 I 3.9 I .3 I	+ I 16.0 I 5.7 I .6 I	0 I 0 I 0 I 0 I	6 I 24.0 I 6.7 I .8 I
99. I GED PC DI I I I	2 I 5.4 I 11.8 I .3 I	11 I 29.7 I 7.7 I 1.5 I	0 I 0 I 0 I 0 I	1 I 2.7 I 1.4 I .1 I	1 I 2.7 I 25.0 I .1 I	5 I 13.5 I 5.6 I .7 I
COLUMN TOTAL	17 2.4	143 20.1	51 7.2	70 9.9	4 .6	89 12.5

COUNT ROW PCT COL PCT TOT PCT	IALLIED 6.I	COMM SER V 7.I	UNSPEC 10.I	LAS UNSP EC 20.I	HOLDING 98.I	GED 99.I	ROW TOTAL
MAJOR							
98. HOLDING	1 4.0 .7 .1	0 0 0 0	0 0 0 0	4 16.0 4.9 .6	2 8.0 100.0 .3	2 8.0 2.6 .3	25 3.5
99. GED PC DI	0 0 0 0	0 0 0 0	0 0 0 0	3 8.1 3.7 .4	0 0 0 0	14 37.8 18.2 2.0	37 5.2
COLUMN TOTAL	140 19.7	33 4.6	3 .4	81 11.4	2 .3	77 10.8	710 100.0