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ABSTRACT

ARAP-SIS, Arapahoe Community College's (ACC's) student follow-up system, consists of seven subsystems. Between 1976 and 1978, five of these were implemented. Data from the goals and intent subsystem revealed that 60% of the students who declared a goal intended to receive an associate degree in an academic field, though many were occupational majors. The course withdrawal subsystem focused on reasons for withdrawal and potential benefits from counseling, while the college withdrawal subsystem looked at students' major, reasons for withdrawal, use of student services, and intention to return to ACC. In both studies, the most frequently cited reason for withdrawal was conflicting job hours. Another subsystem considered students who enrolled for courses but did not show up during the first two weeks. Discounting the many students who actually desired to be reinstated, 26% of the "no shows" or "walk ins" did not attend because of conflicting job hours and 25% because of personal or family reasons. The graduate follow-up subsystem investigated selected student characteristics, career and educational objectives and present status, employment background, transfer problems, relatedness of ACC training to job, interest in returning to ACC, satisfaction with college services and preparation, job prospects, and salaries. Summarized findings are provided and tables present selected data for each subsystem. (AYC)

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FIRST YEAR OF ARAP-SIS

A Summary of the Results  
from a  
Comprehensive Student Follow-Up System

Arapahoe Community College

1978-79

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
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Prepared by

The Office of Institutional Research

June 1979

JC 790385

## Preface and Acknowledgements

The following report is a summary of data collected at Arapahoe Community College through a student follow-up system developed and implemented by the Texas Educational Agency and Texas Coordinating Board for Colleges and Universities. The results could not be made available without support from ACC Administration and without the help and hard work of all the Arapahoe Community College Data Processing Department, the faculty and staff who served as an Advisory Committee for the system, the Development and Support Service staffs at the Texas Coordinating Board, and Texas Educational Information Consortium, Inc., the clerical staff in the Office of Institutional Research, and of course the students at Arapahoe Community College. In years to come the data from this system can be used to improve college programs and services and constantly identify the changing needs of ACC students.

Gail Corbitt

Office of Institutional Research

June 22, 1979

## THE FIRST YEAR OF ARAP-SIS

This report is a summary of the data collected through the student information follow-up system implemented in June 1978. This system is known as ARAP-SIS and consists of seven subsystems designed to track students who enroll, withdraw from courses and/or college, leave before graduating, graduate, and/or who become employed after graduation. There are separate procedures used to follow-up students at any and/or all of the aforementioned times while associated with Arapahoe Community College (ACC).

In June 1978 the first of the seven subsystems that was designed to follow-up graduates of vocational programs was implemented. The following Fall quarter the systems for course and college withdrawal, non-returning students, and employer follow-up were also implemented. That same year, 1978-79, the graduate follow-up was changed to include graduates from academic programs as well as vocational follow-up. After about a year's experience with the system it seemed appropriate to summarize some of the major results and explain how the data have impacted the institution.

### Background

Interest in student follow-up began at ACC in 1975 and in 1976-77 one of the college goals was to develop a comprehensive student information system. A college committee was formed which was called the retention committee and this group began to look at the reasons students do and do not attend ACC. At the same time the committee recognized that development of a comprehensive system was an expensive and overwhelming task and decided to define some objectives and priorities, and have the Research Office look into a way to meet these objectives.

About the same time, the occupational divisions began to develop questionnaires that would meet state reporting requirements on graduates and leavers. The Allied Health area advanced the furthest in this endeavor and developed some comprehensive survey instruments that could also be used for program and curriculum evaluation.

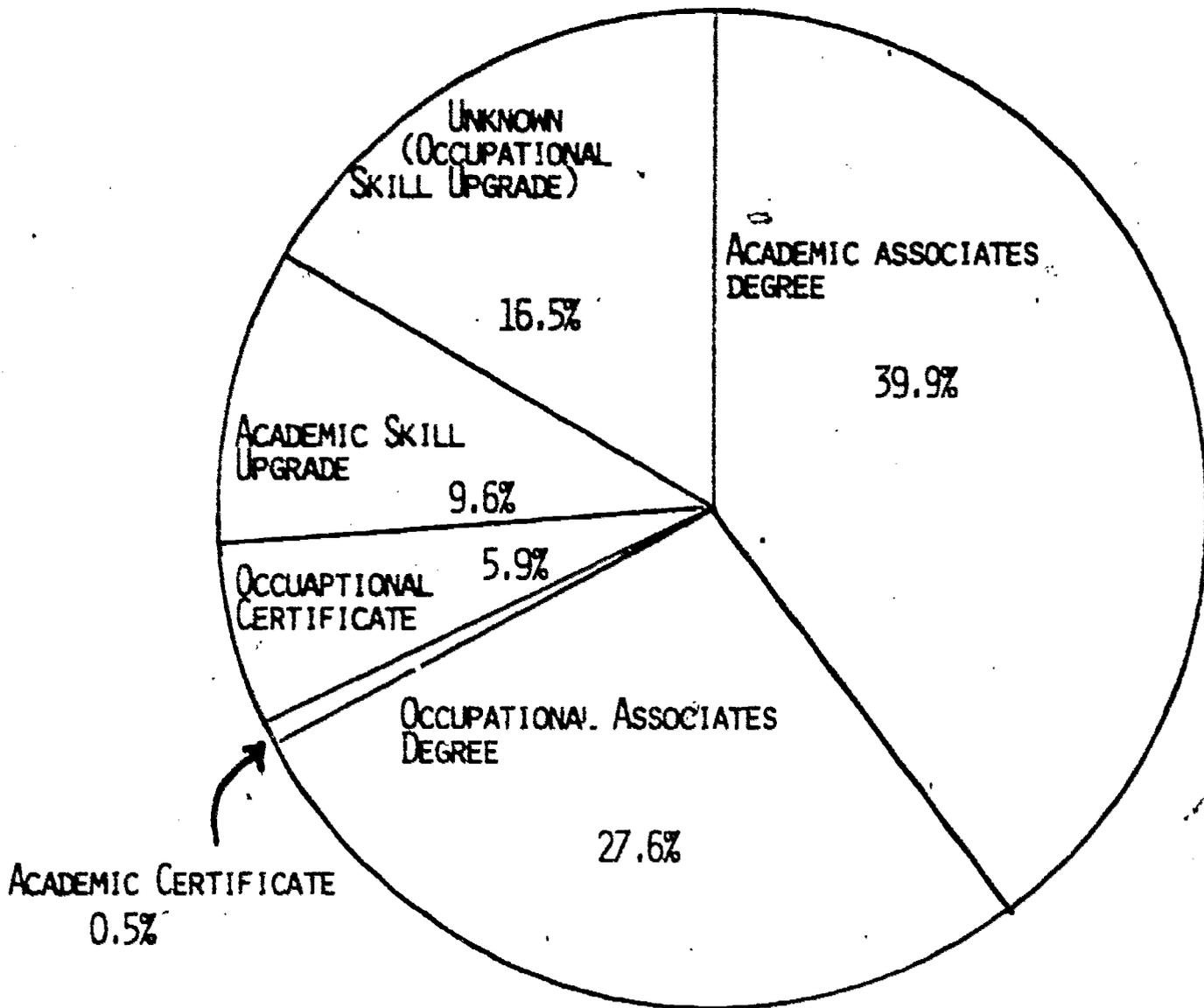
In April 1977 the Research Office began examining systems used by other schools and found a system used by the community college system in Texas that met all of the institutional objectives and seemed to be feasible in terms of cost and adaptation. A committee was formed to examine the proposed system more carefully and compare it to other available systems. After about 3 months of review a request was made to the President's staff to purchase the Texas Student Information System so that implementation could begin in the Fall of 1978-79. The committee worked hard to develop data gathering processes that were integrated into on-going processes at ACC, such as registration, the drop/add process, etc. A schedule of activities was developed and an orientation workshop was held in October 1978 for all interested faculty, administrators, and students.

### Results

Since four subsystems were scheduled for implementation in 1978-79 the results of each subsystem are discussed individually. In general, however, the implementation went as planned; the ground work done prior to implementation and the participation of college representatives from all student service and faculty areas were the keys to the success of the implementation process.

The Data Processing department also did a good job in adapting the software and data entry functions to handle the data instruments as they were collected from the students. The reports prepared by the machine were useable by department heads with no modification. For the most part the reports

Figure 1



STUDENTS BY GOAL/INTENT  
ARAPAHOE COMMUNITY COLLEGE  
FALL 1978-79

were processed in a timely and efficient manner.

The only problem experienced was in the dissemination of the results to appropriate persons. Due to other college issues such as re-organization and budget hearings, the data were not disseminated as quickly as desired. Hopefully, this summary explains what data are available and how they can be used. By next year these other college issues should not prohibit a more timely dissemination and review of the results.

### Goal and Intent

The data gathered from the goal and intent subsystem was incorporated into the application process. Since students must reapply each time they re-enter college after missing at least one quarter (excluding summer), the goal/intent items are periodically updated. Figure 1 displays the data for Fall 1978 quarter for all of the 6564 students on the master file.

Based on this analysis it appeared that 60% of the students who declared a goal were enrolled at ACC with the intent of receiving an associate degree in an academic discipline. Since 50% of the FTE produced are in the vocational areas the goal/intent data seemed to conflict with the expected distribution of students based on FTE production. A crosstabulation between the student's goal/intent and major was then done giving the results in Table 1 and Figure 2. From these data two conclusions can be drawn; 1) that the student's did not differentiate between "academic" and "occupational" programs as represented by their major and 2) that the distribution of students' goals for undeclared majors was more similar to the distribution of goals for academic majors than it was for students with occupational majors.

Close examination of the data surfaced an apparent need for better academic counseling. This conclusion came from the fact that some students said they were here for an academic certificate which is not offered, and that few students declared occupational upgrade as a goal yet almost 20% of the people giving academic upgrade as a goal had occupational majors. Two other things learned about those students declaring academic upgrade as a goal were that: 1) 59% were undeclared majors in this group which is proportionally higher than the college distribution, and 2) 54% of the students in this group had at least one year of college prior to attending ACC. This may suggest that this group of students was here for a specific course or courses that related to their job or personal interest. (As a result the question was revised to include personal interest as a goal choice.)

In addition to the institutional summaries, individual data by discipline and program area were tabulated for each group of students declaring a major. These tables were made available to instructional directors so that they could know more about the students who were declared majors in their areas but had goals that could be inconsistent with their major area of study. These data were also used by the committee to establish a better academic advising model that is to be implemented next year.

### Course Withdrawal Data

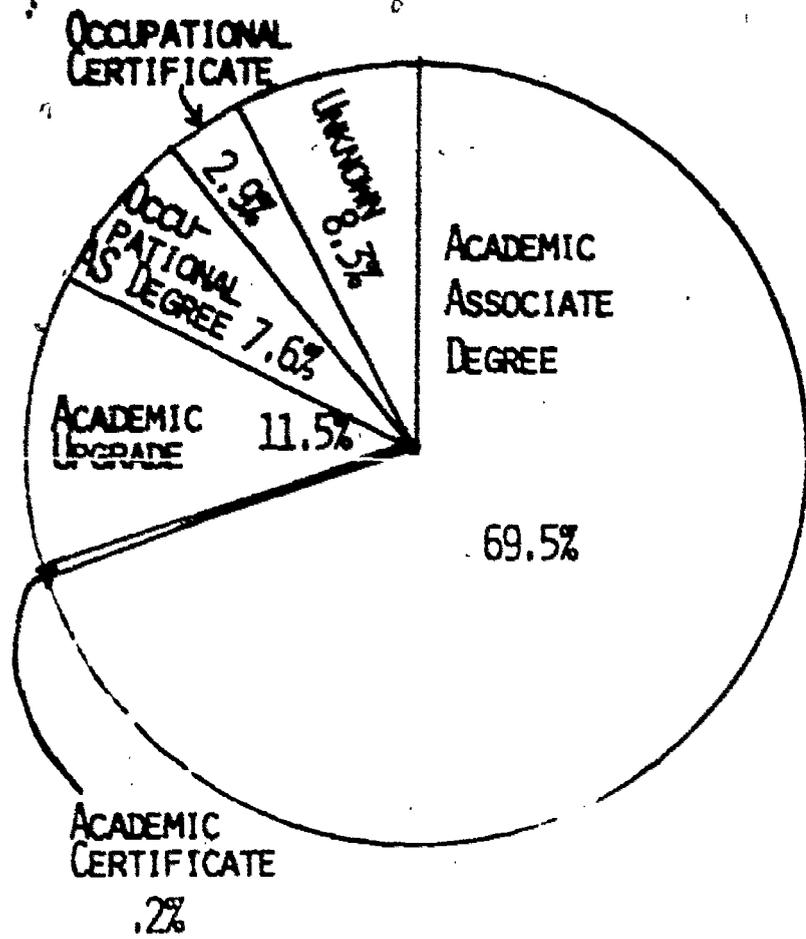
An analysis of the reasons students withdraw from courses was completed for Fall and Spring quarters in 1978-79 but at the time of this report the computer printout for Spring was still not available. The Fall quarter institutional composite for 1132 students which was 17.2% of the total Fall headcount appears in Table II. In addition to the institutional summary the same information displayed in Table II was distributed to instructional directors for each course and discipline offered Fall quarter. Patterns by instructor were not tabulated by the Research Office but the data by course and section were used by divisional directors.

TABLE I: NUMBER AND PERCENTAGE OF STUDENTS BY MAJOR CODE AND GENERAL GOAL OR INTENT

MAJORS BY DIVISION:	<u>NUMBER WITH OCCUPATIONAL GOAL</u>	<u>PERCENTAGE WITH OCCUPATIONAL GOAL</u>	<u>NUMBER WITH ACADEMIC GOAL</u>	<u>PERCENTAGE WITH ACADEMIC GOAL</u>
BEHAVIORAL STUDIES	34	15.9%	163	76.2%
COMMUNICATIONS	5	5.9	72	84.7
ARTS & HUMANITIES	11	5.7	164	83.6
MATH/SCIENCE*	137(36)	25.9(11.1)	348(267)	65.8(82.2)
BUSINESS	916	59.3	410	26.5
HEALTH OCCUPATIONS	346	71.2	99	20.4
PHYSICAL EDUC.	21	75.0	1	3.6
T.T. & I.	437	67.8	121	18.8
UNDECLARED MAJOR	319	11.3	1880	66.4
TOTAL	2207	33.6%	3280	50.0%

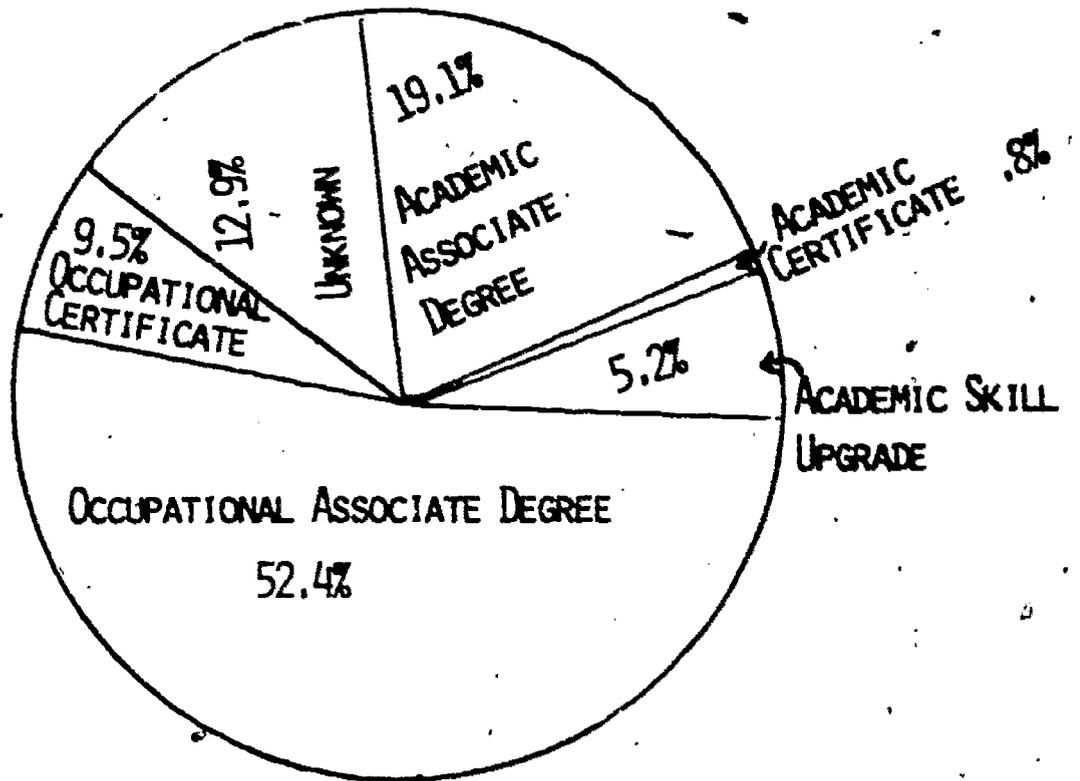
\* INCLUDES BUSINESS MANAGEMENT AA DEGREE. TOTALS IN PARENTHESES FOR MATH/SCIENCE EXCLUDING BUSINESS MANAGEMENT.

Figure 2

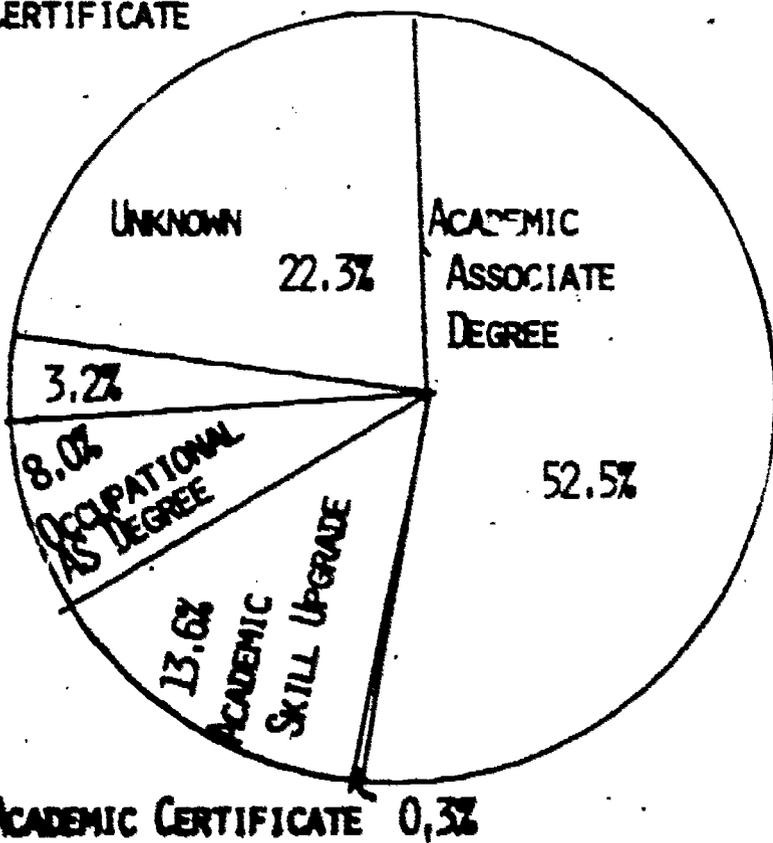


STUDENTS WITH ACADEMIC MAJORS  
( N = 820 OR 12.5% OF THE TOTAL  
STUDENT BODY)

STUDENTS WITH OCCUPTIONAL MAJORS  
(N = 2910 OR 44.3% OF THE  
STUDENT HEADCOUNT)



OCCUPATIONAL  
CERTIFICATE



STUDENTS WITH UNDECLARED MAJORS  
( N = 2834 OR 43.2% OF THE TOTAL  
STUDENT HEADCOUNT)

STUDENTS BY MAJOR AND GOAL/INTENT  
FALL 1978-79

ARAP-SIS FOLLOW-UP

TABLE II  
REPORT DATE FALL 1978-79

F021E COURSE WITHDRAWAL ANALYSIS REPORT.  
REPORT COLLEGE ARAPAHOE COMMUNITY COLLEGE  
REPORT POPULATION COMPOSITE DATA  
REPORT POPULATION SIZE 01132

PLEASE CHECK YOUR REASON(S) FOR DROPPING THE ABOVE COURSE

ATTENDANCE PROBLEMS	GRADE PROBLEMS	DISSATISFIED WITH INSTRUCTION
232 16.5%	99 7.0%	94 6.7%
FOUND JOB IN RELATED OCCUPATION	TRANSPORTATION PROBLEMS	CONFLICTING JOB HOURS
30 2.1%	41 2.9%	261 18.6%
DISSATISFIED WITH COURSE CONTENT	TOO HEAVY COURSE LOAD	PERSONAL/FAMILY ILLNESS OR INJURY
87 6.2%	227 16.1%	95 6.8%
OTHER PERSONAL/FAMILY REASONS	OTHER	
135 9.6%	105 7.5%	

DO YOU FEEL A DISCUSSION WITH COLLEGE COUNSELOR WOULD BE BENEFICIAL TO YOU?

NO	YES	PERHAPS
48 5.5%	728 84.2%	89 10.3%

Since the students could give more than one reason for dropping classes the data in Table II must be carefully interpreted. Nonetheless about 20% of the reasons could be construed to be instructor or course content related. Another way to say this is that 20% of the time students withdrew from classes at least in part due to discontent with the instruction, course content or grading. The primary reason students dropped classes was due to changing job hours and/or attendance problems. These two reasons which account for 35% of the total reasons given could be related to each other. About 2% of the students dropped a class because they found a job related to their course work and the rest of the personal or non-course related reasons accounted for about 27% of the total reasons given by students.

Of concern to the college were the 16% who dropped classes due to "heavy course load". This may be another indicator that advising is needed for students who take too many courses given their area of study, work situation, etc.. As with the goal and intent data, these course withdrawal data were sent to the committee on college advising as rationale for needing a new advising model.

### College Withdrawal

In the Fall and Winter quarters of 1978-79 about 7.0% of the total student headcount withdrew completely from college. Two hundred and ninety four (294) of the 593 who withdrew these two quarters were students with occupational majors, Figure 3 displays the college withdrawals by major and it is important to note that 46.2% were students with undeclared majors. (This 46% was similar to the headcount distribution of students at ACC in which 43% of the total student body were undeclared majors.)

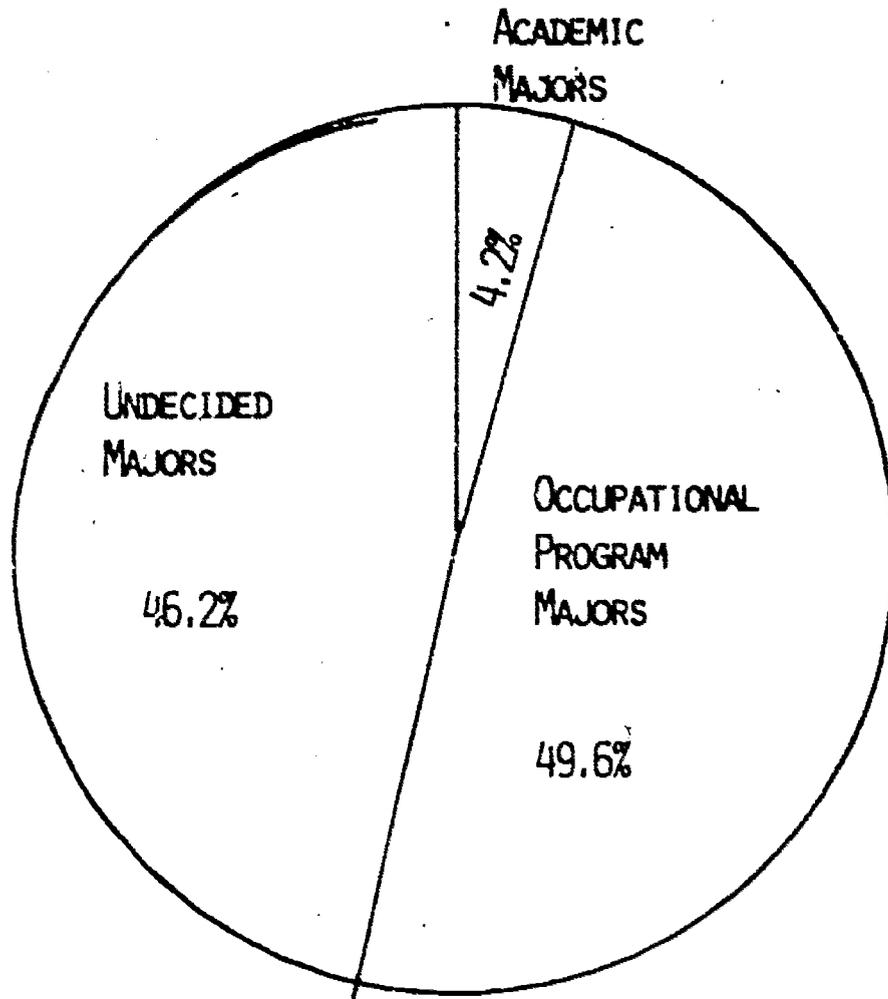
Figure 4 gives the reasons the students withdrew along with the number of times the reason was expressed and the percentage each reason was of the total reasons given. Since 75% of the students who withdrew from college were employed, it is not surprising that the most frequent reason given for leaving college was conflicting job hours. Of the 75% who were employed nearly 90% of these students were employed more than 30 hours per week. "Conflicting job hours" seemed to be related to the 12% indicating "attendance problems" as the reason for dropping college. It appeared that "college dissatisfaction" was not a major reason for the students leaving the institution and when asked about their feelings toward their educational experience at ACC, 78% said they were at least satisfied with their experience at our college.

Only 169 of the college withdraws (about 28% of the total) indicated that they used any of the student services offered and of those who responded about 41% used the counseling service. The next most frequent service used was the veterans office followed by the financial aid office. If these offices desired feedback from students who used their services a list of students could be furnished so that follow-up by the student service directors could occur.

About 11% of the students who withdrew said they definitely would not return at some future date. These data are consistent with the number of students who indicated some disappointment with their college experience at ACC. For the 63% who said they would return at a future date class schedules and/or letter could be sent at a later date encouraging these students to re-enroll. Mailing labels for these students are available upon request.

### Walk-Off Students

Perhaps one of the most interesting subsystems in the follow-up system has to do with students who enroll for courses but do not show up during the first two weeks. These students are identified as walk-offs and state law

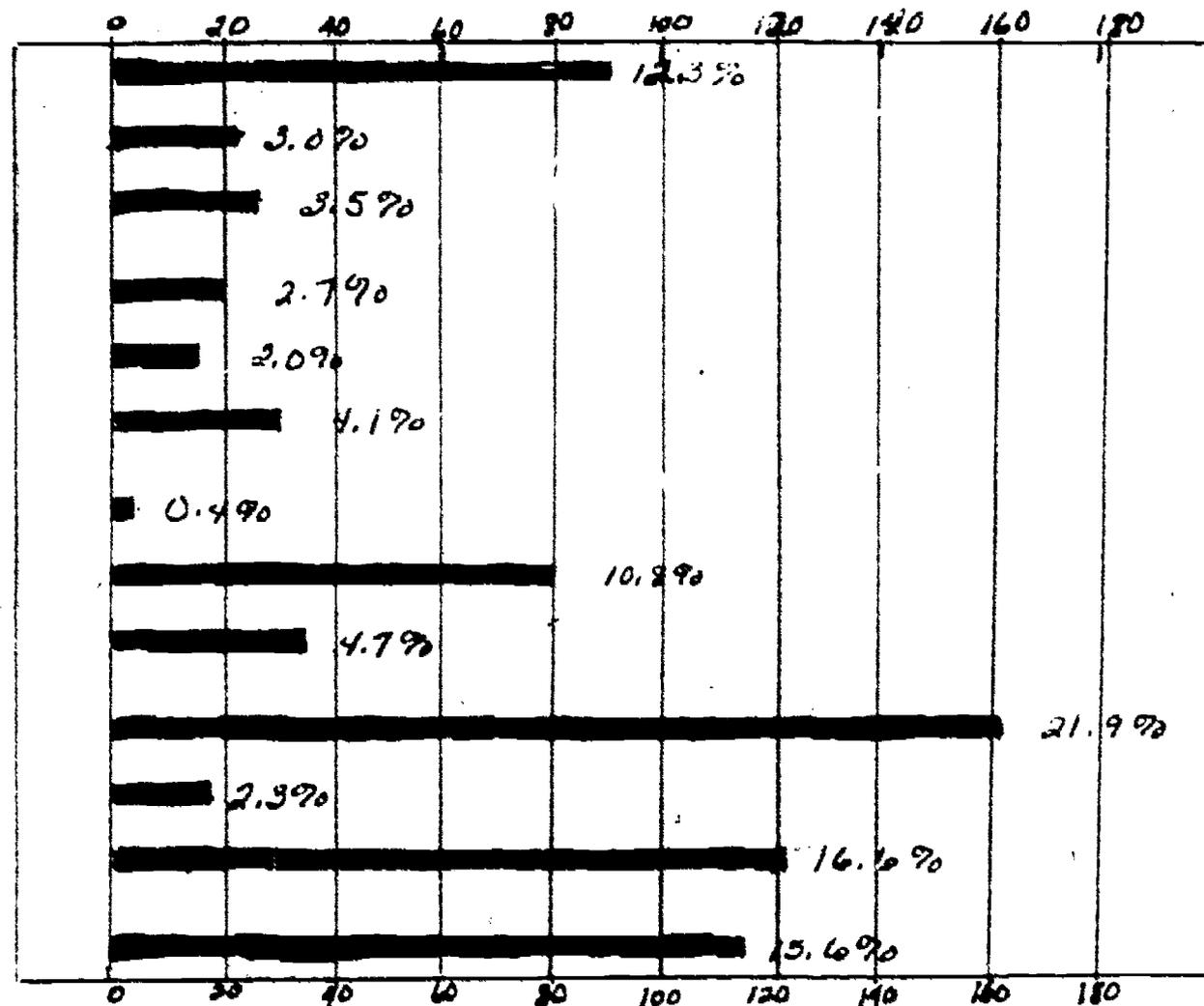


STUDENTS WITHDRAWING FROM ACC BY MAJOR  
FALL AND WINTER COMPOSITE  
1978-79

REASONS STUDENTS WITHDREW FROM ACC  
 FALL AND WINTER COMPOSITE  
 1978 - 1979

REASON:

- ATTENDANCE PROBLEMS
- FOUND JOB IN RELATED OCCUPATION
- DISSATISFIED WITH COURSE(S)
- FINANCIAL REASONS
- GRADE PROBLEMS
- TRANSPORTATION PROBLEMS
- DISSATISFIED WITH COLLEGE
- PERSONAL/FAMILY/ILLNESS/INJURY
- DISSATISFIED WITH INSTRUCTION
- CONFLICTING JOB HOURS
- CHANGE OF RESIDENCE
- OTHER PERSONAL/FAMILY REASONS
- OTHER



NUMBER OF STUDENTS GIVING REASONS

requires the college to delete these students from the roster and refund their money if they do not attend class during the census period, which is the first eight class days of each quarter.

The process used to gather these data turned out to be a major benefit of the system as the communication with the student actually saved the college FTE and reduced attrition. After the rosters were received from instructors indicating which students have failed to show up for class during the census period, a letter was sent to each student explaining that our records indicated that they may be entitled to a refund if they did not intend to return to the classroom. Prior to this letter sending process, students were automatically deleted and a refund was processed at the end of the quarter. Each quarter there were about 300 to 500 students who were identified as deletes, and it was surprising when only a third of the students who were sent letters responded to the survey. The Research Office expected to receive a high return since the processing of a refund could be initiated by the return of the survey card. It turned out, however, that the non-responding two thirds of the students did not want to be deleted from the classroom and were in fact reinstated. Prior to this process the burden was on the student to find out if he/she had been deleted and if the student had been deleted she/he would have to re-add the class. By the college communicating with the student and taking the burden of record keeping, the Admissions and Records office estimated that about 75-80 FTE were saved each quarter that were previously lost during the first eight days. Based on the feedback from students the Research Office felt that the process of communication was a definite benefit to the college and afforded the student an outside contact regarding record keeping problems.

The results of the data cards returned gave reasons for dropping the class that were similar to the reasons students in general withdrew from classes. Since the student never attended class the instructor/class related reasons received virtually no response and "conflicting job hours" was the most frequent response given with about 26% of the students giving this as the reason they did not attend class after enrolling. Personal and family reasons were second with about 25% of the students giving reasons related to their personal situation. Attendance problems and "Too heavy course loads" were the third most frequent reasons given for not showing up for class accounting for another 15% of the total responses.

The employment status of the walk-off group was also similar to that of the group of students who withdrew from college. About 77% were employed at least part-time and about 70% of those employed worked more than 30 hours per week. In general, the walk-offs were satisfied with the services received from the college.

#### Graduate Follow-up

There are two years of data regarding follow-up of vocational graduates and one year of data for academic graduates. The data are available by program and/or discipline and the process of follow-up called for a complete survey of all graduates. After an initial mailing done about 3 months after graduation for occupational graduates and 6 months after graduation for academic graduates, a second mailing was done. At the end of the two mailings about 67% of the students had returned the survey forms. The remaining third who did not return the survey by mail were telephoned and were only excluded from the survey if they could not be reached after three attempts.

Placement results were compiled by the Job Placement Office and a state report of vocational students was prepared based on the results of the survey. In addition, the data can be used internally to help assess and/or evaluate

programs, job markets, and student expectations. It is hoped that after the graduate follow-up on the 1978-79 completers is finished the data base will be sufficiently large so that data about each program area can be distributed to interested students. This way potential students can see what happened to prior students as a result of the programs at the college.

Table III gives selected results from the two years of graduate follow-up for occupational graduates from 1976-77 and all graduates for 1977-78. The 1977-78 graduates are broken down by type of major program in which they received their degree. Other summaries such as by sex, degree type, race, and by individual program are available from the Research Office. From the data in Table III it appeared that about half of the occupational graduates for the past two years are interested in degrees that will prepare them for jobs. Another fourth of these occupational graduates attended ACC in order to improve the skills for their present job. The number seeking transfer to another college or University was expectedly low.

The data also showed that about 67% of the non-occupational graduates sought degrees that facilitated transfer to a four year institution. Of those non-occupational students who indicated that college transfer was their goal the survey indicated that about 78% did indeed go on to another institution within 6 months after graduation from ACC. In general these students experienced few problems in transferring credits from ACC to another institution but 57% lost at least some credit with the average credits lost being about 10 hours.

About 10% of the occupational students transferred to a four year institution which is slightly higher than the percentage of students indicating that this was a degree goal. These students experienced slightly more problems in transferring credit with the average hours lost about 17. Overall, however, the students in the survey indicated that they were adequately prepared for continuing their education based on the training received at ACC.

The job prospects seemed to be a little better overall for the 1977-78 graduates than they were for the 1976-77 grads, with about 77% employed at least part-time. Of those that were employed at the time of the survey about 37% had their jobs prior to attending ACC. About 75% of the graduates getting jobs were in occupations that were closely or directly related to the training received at the college and the average reported salary was about \$900 per month.

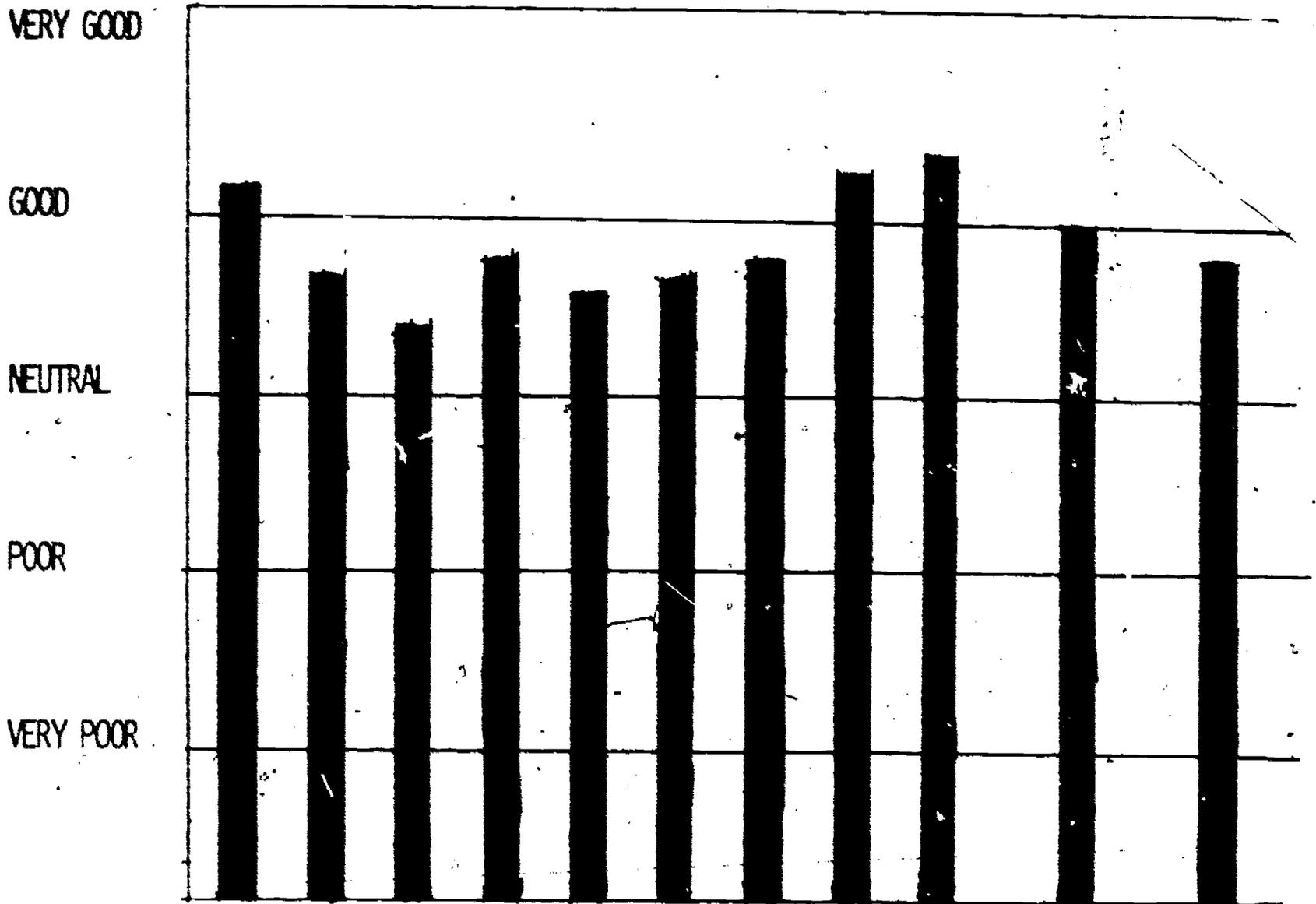
The only decrease in the 1977-78 data from the 1976-77 year occurred in the percentages of students who expressed a desire to return to ACC for more courses. In 1976-77 about 63% of the students who responded to the question (representing about 40% of the total graduates in the survey) said they would like to return to ACC for more courses. In 1977-78 the percentage who said they would return was about 56% of the total responding to the question which only represented 34% of the total graduates in the survey.

The final figure in this report is that reporting the ratings of the college services by the 1977-78 graduates. Figure 5 gives the number of students in the survey indicating that they used the service listed and the bar chart records the average rating of the respective service. From these data it appeared that the Library was the most utilized service and also had the highest overall rating of any college service listed in the questionnaire. The data also indicated that students were slightly more satisfied with the training received as it related to their job than were students who continued their education.

### Synopsis

In conclusion, the first year's experience with ARAP-SIS has been successful. The college has begun to build a data base that offers institutional perspective as well as program/discipline detail. The results were often interesting and

FIGURE 5: RATINGS OF COLLEGE SERVICES UTILIZED BY 1977-78 GRADUATES



FINANCIAL AIDS

COUNSELING

PLACEMENT ASSISTANCE

COURSE ADVISEMENT

TUTORING SERVICES

VETERANS SERVICES

LEARNING/LAB PACKAGE

LIBRARY SERVICES

USEFULNESS OF TRAINING IN PERFORMING JOB

USEFULNESS OF TRAINING FOR CONTINUING EDUCATION

STUDENT ACTIVITIES

NUMBER OF STUDENTS RESPONDING

129 204 125 184 109 99 149 293 287 115 157

% OF TOTAL IN SURVEY

21.4% 33.8% 20.7% 30.5% 18.1% 16.4% 24.7% 48.9% 47.6% 19.1% 26.0%

SERVICE RATED 13

**TABLE III Selected Graduate Follow-up Results**

	<u>1976-77</u>		<u>1977-78</u>		<u>1977-78</u>	
	<u>Occupational Graduate</u>		<u>Occupational Graduate</u>		<u>Non-Occupational Graduate</u>	
Number useable Surveys	427		532		69	
Primary Purpose in Completing Degree:	n	%*	n	%*	n	%*
Job Skill Improvement	101	24.3%	120	24.9%	1	1.5%
Job Skill Preparation	234	56.3	226	47.0	10	14.7
University Transfer	27	6.5	43	8.9	45	66.2
Personal & Other	54	12.9	92	19.2	12	17.6
Present Status After Graduation:						
Employed Full-Time	304	74.3%	307	72.1%	17	24.9%
Employed Part-Time	46	11.2	47	11.0	10	14.5
Seeking Employment	15	3.7	19	4.5	4	5.8
Continuing Education	30	7.3	36	8.5	35	50.7
Military Duty	7	1.7	7	1.6	1	1.4
Unavailable for Employment	7	1.7	10	2.3	2	2.9
Had Job Prior To Attending ACC:						
YES	119	42.8%	131	48.0%	7	53.8%
NO	159	57.2	142	52.0	6	46.2

**STUDENTS TRANSFERRING TO ANOTHER COLLEGE**

Number Currently Enrolled in Another College/University:						
Part-Time	25	44.6%	25	46.3%	12	28.6%
Full-Time	31	55.4	29	53.7	30	71.4
ACC Credit Hours Lost in Transferring:						
None	24	54.5%	12	26.1%	16	44.4%
1-6	4	9.1	6	13.1	8	22.1
7-20	7	15.9	11	23.9	11	30.5
21 or More	9	20.5	17	37.0	1	2.8

\* Percentages of the total responses for each question.

TABLE III (Cont.)

	<u>1976-77</u> <u>Occupational</u> <u>Graduates</u>		<u>1977-78</u> <u>Occupational</u> <u>Graduates</u>		<u>1977-78</u> <u>Non-Occupational</u> <u>Graduates</u>	
<u>STUDENTS GOING INTO WORKFORCE</u>						
<b>Relatedness of ACC Training To Present Occupation:</b>						
	n	%	n	%	n	%
Directly Related	225	62.5%	202	55.6%	3	9.4%
Closely Related	56	15.6	72	19.8	5	15.6
Unrelated	78	21.7	89	24.5	24	75.0
<b>Average Full-Time Monthly Salary</b>	\$825		\$882		\$836	
<b>Number Responding</b>	233	76.6%**	207	67.4%**	7	41.2%**
<b>Number in Excess of \$1,200/More</b>	42	18.0%	45	19.8%	2	28.6%
<b>Rating of Job Availability In Occupational Area:</b>						
Very Good or Good	95	41.3%	148	60.2%	10	71.4%
Neutral	72	31.3	60	24.4	1	7.1
Very Poor or Poor	63	27.4	38	15.4	3	21.5
<b>Interest In Returning To ACC at a Later Date:</b>						
YES	174	63.0%	174	56.9%	34	55.7%
NO	102	37.0	132	43.1	27	44.3

\*\* Percentage of those indicating that they were employed full time.

useful but the process of data collection contributed most to not only the success of the system but has helped reduce attrition. In years to come, the data base has the potential to provide consumer information for students as well as job market assessment for programs. The only shortcoming experienced thus far was that the data have not been integrated into the management system of the college. In order to overcome this the Research Office will emphasize the data dissemination process in the future so that the comprehensive student follow-up data can become part of the management information system regarding programs and student services.

JUNIOR COLLEGE

CLC  
JUNIOR COLLEGES

22