REPORT RESUMES

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ATTRITION RATE STUDY,
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INSTEAD OF FOCUSING ON STUDENT CHARACTERISTICS, AS DO MOST DROPOUT STUDIES, THIS ONE (1) CONSIDERS SPECIFIC INSTITUTIONAL CHARACTERISTICS OF GRADING PRACTICES, (2) ANALYZES THESE PRACTICES WITHIN A GIVEN TERM INSTEAD OF OVER SEVERAL YEARS, AND (3) BROADENS THE DEFINITION OF ATTRITION TO INCLUDE BOTH FAILURE AND WITHDRAWAL. IT ATTEMPTS TO IDENTIFY THE INSTRUCTIONAL AREAS WHERE THE GREATEST STUDENT LOSS OCCURS AND, BY SO DOING, TO PREDICT STUDENT ACHIEVEMENT FROM THE PREDICTION CRITERIA THEMSELVES, RATHER THAN FROM THE STUDENT ATTRIBUTES. AN EXISTING RECORDS SYSTEM FOR ENROLLMENT AND GRADE STUDIES WAS MODIFIED TO PRODUCE SUMMARIES OF GRADE DISTRIBUTION AND ATTRITION RATE BY INSTRUCTOR AND ACADEMIC UNIT. THE SYSTEM PERMITS THE COMBINATION OF ENROLLMENT AND LETTER GRADES DATA FROM TWO CARDS ON ONE SUMMARY CARD AND THE CONVERSION OF THE GRADE DATA INTO PERCENTAGES OF ORIGINAL ENROLLMENT. IT CAN ALSO SHOW PERCENTAGES OF THOSE WITH OTHER GRADES (AUDITS, DROFS, INCOMPLETES, ETC.), AND A STUDENT'S GPA. THE PRINTOUTS INCLUDE AN ALPHABETICAL LISTING BY INSTRUCTOR, A RANK ORDER LISTING OF THE ATTRITION RATE OF HIS STUDENTS, AND LISTINGS IN EACH ORDER BY COURSE, DEPARTMENT, DIVISION, AND FOR THE WHOLE SCHOOL. THE SYSTEM CAN ALSO BE CODED TO GENERATE OTHER LISTINGS FOR VARIOUS SUB-GROUPS. CONCLUSIONS FROM THE ASSEMBLED DATA ARE NOT SHOWN. (HH)

ATTRITION RATE STUDY

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The student attrition rate is a problem of national concern for colleges and universities in general and junior colleges in particular. In general usage, the term attrition rate refers to the proportion of students withdrawing from college or failing to re-enroll after one or more terms after original entry but prior to completion of their program of study. The literature is replete with studies of this problem and, in general, these studies have tended to focus on student characteristics associated with the dropout. present study differs from this general pattern in three ways: first, the focus is on the specific institutional characteristic of grading practices rather than on student characteristics per se. Second, the study is based on an analysis of these grading practices within a given term rather than following the student dropout rate over a period of several years. Third, the definition of attrition rate as used here is broader than that in general use and refers to the proportion of students in a given section or other academic unit who either fail or withdraw. Thus, for this study a student is counted once for each course in which he was enrolled. The rationale for combining the failures and withdrawals is that both of these result in the student receiving no credit for a course in which he enrolled for credit. Also, in the junior college there is a tendency for students to withdraw unofficially by ceasing to attend classes. The resulting

failing grades actually represent a withdrawal but are not distinguishable as such through present records.

The importance of this study is that it helps to identify those areas within the instructional program where the greatest student loss occurs. The results for the total college provide a normative standard against which to evaluate variations within the institution. They also provide for the inter-institutional comparison with normative data collected from similar institutions in a state and national sample. The results are expected to serve to identify problem areas within the instructional program --- they will not necessarily point to solutions which may be related to other factors such as curriculum, academic policies or procedures, or such student characteristics as aptitude, prior achievement and experience, motivation, or outside activities. Undoubtedly, student achievement like other forms of human behavior, is determined by multiple factors. However, studies of the prediction of student achievement have tended to concentrate on factors within the student rather than investigating the criterion itself. It is on this criterion that this study is focused.

While beyond the scope of this study, it is quite apparent that there are other standards available for evaluating the criterion of grade distributions and attrition rate. For the junior college college parallel transfer programs, student achievement after transfer to senior insti-



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tutions may be compared with grades earned in the junior college. This type of comparison is of primary importance in the evaluation of a junior college program. That it has not gone unnoticed is indicated by the attention given to this area in research on the junior college by such studies as the one by Knoell and Medsker. 1

The present study outlines a data processing system for producing attrition rate data, as defined above, for Miami-Dade Junior College. The system was built on an already existing records system which is quite sophisticated in terms of the efficiency with which it provides comprehensive data on enrollment and grade summaries. With this data already in machineable form, it has been possible to extend the system to produce more easily comprehensible summaries of these grade distributions and attrition rate by instructor and academic unit. The system is outlined in the attached flow chart. In brief the system provides for the combination of data on enrollment and grades from two cards into one summary card, and the conversion of the number of letter grades and so forth into percentages of original enrollment. addition to the letter grades, the summary report shows percentages of those receiving other grades (Audits and Incompletes), Drops, Attrition Rate (AR), and the Grade Point

Dorothy M. Knoell and Leland L. Medsker, From Junior to Senior College: A National Study of the Transfer Student (Washington: American Council on Education, 1965).

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Average (GPA). The printouts include an alphabetical listing of this data by instructor, plus a rank order listing by instructor in order of attrition rate. Likewise, listings in each order are printed out by course, department, division and the total campus or center. Although not included as a routine part of this system, coding included in the Instructor Attrition Rate Summary Card provides for the generation of other types of listings for various sub-groups (e.g., the rank order listing of instructors within a given department or division).

A sample printout of the Instructor Attrition Rate Report is included in the appendix along with a card layout of the Attrition Rate Summary Card.

The following equipment is utilized in this project:

IBM 084 Sorter

IBM 088 Collator

IBM 1620 Computer

GGW:v1s 5/20/66



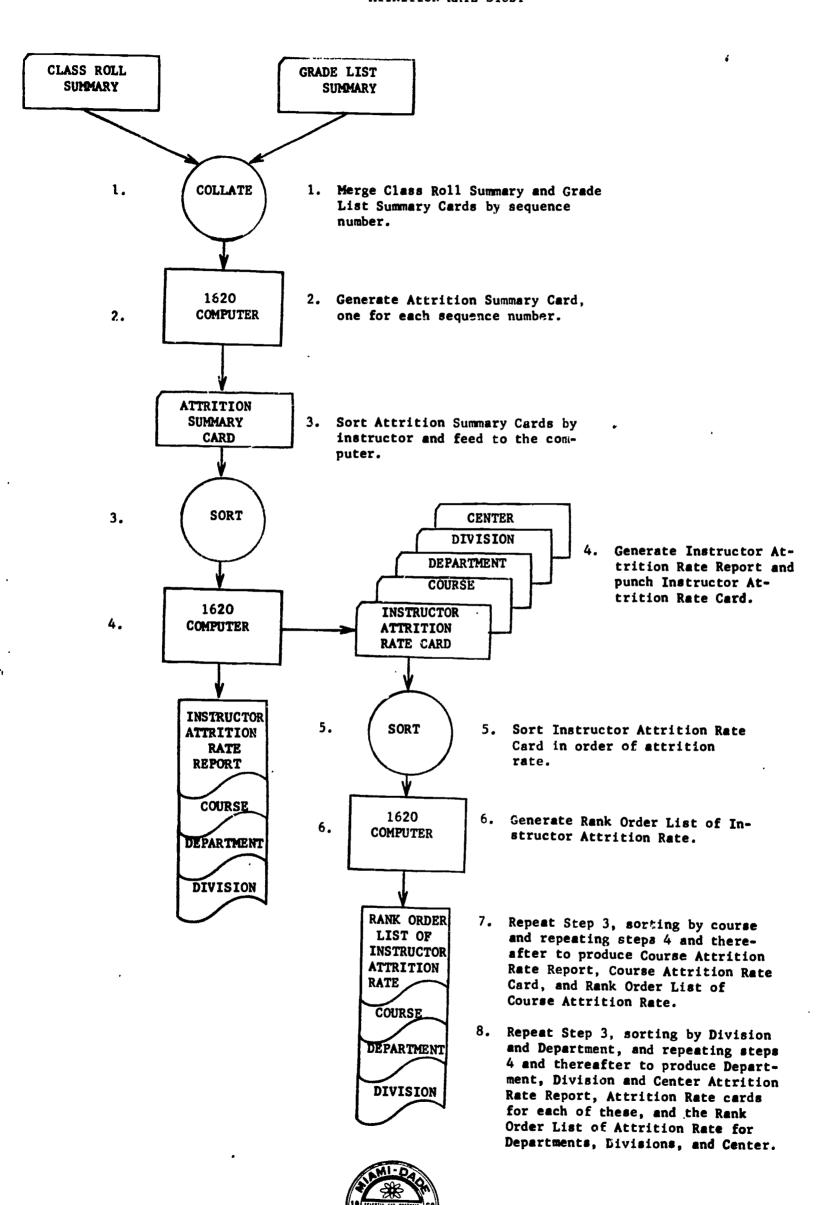
ATTRITION RATE SUMMARY CARD

Cami Field	Columns From Thru			D a s	na mka				
Card Field			Remarks						
Instructor Name	1	18	From	Grade	List	Summary	Card		
Course Abbreviation	19	21	From	Grade	List	Summary	Card		
Course Number	22	24	From	Grade	List	Summary	Card		
Original Enrollment	25	29	From	Class	Roll	Summary	Card		
Percent of A's	30	32	Generated by Computer						
Percent of B's	33	35			1	·			
Percent of C's	36	38							
Percent of D's	39	41			1				
Percent of F's	42	44			1				
Percent of Other	45	47			ļ				
Percent of Drops	48	50			į				
Attrition Rate	51	53]				
GPA 4	54	56							
Center or Campus		57							
Division		58			1				
Department	59	60			· .				
Year and Term	61	62							
Blank	63	65		-					
Semester Hours	66	71			Y				
Card Code		80	Card 1	Inst	ructo	r ARSC			
·			Card 2	Cour	se AR	SC			
			Card 3	Depar	rtmen	t ARSC			
			Card 4	Divi	sion A	ARSC			
			· Card 5	Cent	er or	Campus A	ARSC		

Card 1 All Fields Punched
Card 2 Drop cc 1-18
Card 3 Drop cc 1-24
Card 4 Drop cc 1-24, 59-60
Card 5 Drop cc 1-24, 58-60

M-DJC DIR GGW:v1s 5/4/66





PROPOSED SAMPLE REPORT

MIAMI-DADE JUNIOR COLLEGE

DATE RUN - MAY 3,	1966		GRADE	DISTRI	BUTION	AND	ATTRITIC	ON RATE	REPC
INSTRUCTOR NAME	CRS CRS	ON	A	В	С	D	F	OTHER	DR
DUERSTOCK JOSEPH DUERSTOCK JOSEPH	DAP 501 DAP 602	65 26	10.0 11.0	22.3 23.3	32.3 32.3		·	1.8	1
DUERSTOCK JOSEPH	TOTAL	91	10.0	22.3	32.3	12.2	9.6	1.8	1



COLLEGE PAGE 1 PERIOD COVERED - SPRING 65-66 TION RATE REPORT DEPT CTR DIV OTHER **DROPS** AR **GPA** 21.5 1.8 11.9 2.13 14 1 11.9 20.5 2.23 . 1 1.8 14 21.5 2.13 14 1 11.9 1.8

> UNIVERSITY OF CALIF. LOS ANGELES

> > NOV 3 1967

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