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DEVELOPMENT OF THE PUNCHED CARD REGISTRATION
SYSTEM AT NORTH TEXAS STATE COLLEGE

THESIS

Presented to the Graduate Council of the
North Texas State College in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF BUSINESS ADMINISTRATION

By

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CHAPTER I

INTRODUCTION

The trend toward mechanization of all phases of business life in America has progressed to the point that many of the nation's colleges and universities have utilized the punched card as a medium for expediting the tremendous volume of detail involved in maintaining adequate and accurate records for the individual collegiate student. The past five years have seen a tremendous increase in the number of International Business Machines Corporation installations in schools of higher learning. Many more institutions are contemplating the addition of such equipment to handle the huge influx of students who, according to J. C. Matthews¹, will approximately double the present college enrollment by 1970, based upon present population trends, and barring some major catastrophe in the meantime.

Statement of the Problem

A college planning to install a punched card registration system will find itself in the same position in which North Texas State College stood in 1954. The decision had been made to install International Business Machines

¹Denton Record Chronicle, November 9, 1955, Sec 2, p.1.

Corporation punched card accounting for registration and accounting procedures; the machines had been ordered; it was time for the development of the actual procedures and materials to be used. There was a definite need for more information on existing punched card registration systems than could be gathered in a limited time by visiting institutions using a mechanized registration system.

Training and indoctrination in job methods and procedures in an office such as the Tabulating Department of a college is of vital importance from two major aspects. First, at North Texas State College, many college students are used on a temporary basis during the period when the work flow is accelerated due to final grades, pre-registration application processing, registration, and post-registration procedures due to late registration, class adds, drops, transfers and other miscellaneous jobs.

These student employees must be given some sort of concentrated introduction to the work they will be performing, or they will become merely an addition to the payroll and be of little or no value to the regular employees. Particular emphasis must be placed on accuracy, especially for those employees who assign permanent and alphabetic sequence numbers and code personal information which will be used in statistical reports. It would be highly desirable to have only permanent employees assigned to these tasks, but it is not always possible to do so.

Also, quite frequently the regular employees are wives of students, so that there is a greater than normal turn over of personnel. Permanent employees are usually hired at such a time as to allow as much training as possible before entering into a registration period, but even permanent employees become familiar with the work procedures much more rapidly where some form of job manual in written form is available for ready reference when questions as to proper procedure arise. Understanding of the "Why" of any job is much more valuable than the blind following of a set of rules that have been read, perhaps even memorized, but not thoroughly understood.

Purpose

To help fill the definite need for ready reference to methods used in various institutions across the nation, this study will present a history of the development and implementation of a punched card registration system in North Texas State College, with emphasis placed upon those areas of probable major interest to other colleges faced with a similar problem. The study will cover planning stages of registration materials, and will then present a description of the various stages and processes involved in a typical semester from pre-registration preparations through posting the student's grades to the permanent record.

The main body of this study will provide general instructions; while a step by step procedural manual will be developed for reference of personnel who will be working with various phases of the mechanized registration process. A procedural manual is especially needed to provide temporary registration-rush-employees with the detailed procedural information on how to perform their particular job assignment as well as an understanding of the importance of extreme accuracy in every detail of their work. New employees provided with a copy of this job manual can be given an overview of the entire scope of the registration operation as they become familiar with the details of the necessary work operations. Where time permits, the best way to answer any question that arises on a point of procedure is to re-read the pertinent portion of the general instructions, after studying the procedure manual, to determine the ultimate effect of the question in point. In such a way a thorough understanding of the registration system as a whole can be achieved while learning the details of the individual work operation.

Delimitations

This study will make no attempt to go into any fields of college administration other than registration, and study in this field will be strictly limited to those areas with which the punched card method has been applied at North Texas

State College. Although there is an application of punched card accounting to accounting procedures at North Texas State College as well as at most other institutions using punched card registration, the accounting field is broad enough for a study within itself, so will be excluded from this study.

The chapter which includes the discussion of statistical methods and reports made at North Texas State College will be limited to those statistics which are most generally called for by agencies to which the institution must make certain types of reports. In the case of North Texas State College, the data required by the Texas Education Agency will provide the bulk of the discussion. Data called for by accrediting agencies, such as the Southern Association of Colleges and Universities will, in general, be available directly or with only very minor modification from the procedures through which the state required reports are tabulated.

Definition of Terms

Registration packet.--Those materials (which will be specifically defined and described in detail in the pertinent chapter), which are presented to every prospective enrollee, upon which he must enter certain items of personal data; the possession of which is necessary for admittance to the registration process.

Gang-punching.--A mechanical process whereby information in one card may be transferred to each following card. Where a control is established such that the information to be transferred may be changed by the insertion of a peculiarly marked card, the process is known as intersperse-gang-punching.

Sources of Data

The basic source of data for this study was experience received from the actual organization and installation of the punched card registration system at North Texas State College. Individual procedures from the University of Houston, the University of Texas, the University of Illinois, the University of Wisconsin, Oklahoma Agricultural and Mechanical College, and Texas Agricultural and Mechanical College were studied prior to the actual definition of any procedure or the design of any form. Suggestions from one or several sources were considered without making complete use of any individual procedure or design.

Related Studies

Nearly twenty years ago, Max Fichtenbaum, who is currently the associate registrar of the University of Texas, wrote an article² describing the system then in use for the

²Max Fichtenbaum, "Use of Hollerith Tabulating Machines in Preparing Registration Records," Bulletin of the American Association of Collegiate Registrars, II (April, 1936), 171-186.

application of the punched card accounting machine method to the work of the registrar's office. This study has not been re-written in detail, although portions of generalized descriptions, which have been brought up to date, are available from the University of Texas. At approximately the same time, G. W. Baehne acted as editor of a book³ which outlined some practical applications of the punched card method of accounting for colleges and universities.

Within the past few years, however, there have been no complete works which cover the entire registration process, from the initial procedural and form design to a detailed explanation of the job steps to be taken in the completion of an entire cycle of punched card registration accounting.

Treatment of Data

Chapter II will deal with the development of materials to be used for the actual registration process, as well as materials to be used during the semester which result directly from registration, such as probation reports, final grade reports, and the permanent record form.

Chapter III will deal with the job steps and procedures which must be taken before the beginning of the semester. In general, this will be the processing of the application for admission for the individual student, the statistical

³G. W. Baehne, Practical Applications of the Punched Card Method in Colleges and Universities (New York, 1935).

coding and registration packet preparation, as well as the preparation of the class cards which will be used in the actual registration process.

Chapter IV will deal with the actual time of registration, and the immediately following period of time in which the work steps are primarily connected with the actual registration process. This chapter will include an explanation of the registration process, the handling of registration packets and class cards as the students complete their individual registrations, the preparation of the class lists, and the procedures followed for such miscellaneous transactions as class adds, drops, transfers, and late registrations.

Chapter V will be concerned primarily with the preparation of statistical reports, but will, however, contain a discussion of the probation report procedure which is a mid-semester operation.

Chapter VI will deal with the end of the semester procedures, which will consist primarily of a discussion of the grade reports, both teacher and student, and the permanent record posting operation.

Chapter VII will summarize and conclude the study.

Validation

The developments of this study have been validated in three general ways. First, the procedures developed have

been tested and proven feasible by the passage of time, and the operational experience of over a year. Next, as the step by step procedures have been developed, they were checked by the employees of the Tabulating Department to insure that the job procedures being used were accurately described. This also provided a reverse check, in that it pointed up any areas in which the job procedures to be followed were not being followed exactly as intended. Finally, the completed study was read by Carl Hoffman, International Business Machines Corporation electric accounting machine representative from the Dallas, Texas office. He suggested certain changes and additions which have been incorporated into the body of this study and the actual operating procedures.

CHAPTER II

DEVELOPMENT OF MATERIALS FOR REGISTRATION AND RELATED PROCEDURES

In developing registration materials to be used by students and faculty, an effort was made to keep new-type materials nearly like the old materials in form layout, question sequence, and items of like nature, to make the new materials as familiar as possible to the prospective users. On some materials, such as the teachers' report of student grades, there were very few changes made in preparing the new form. In other areas, such as the registration packets and class cards, it was necessary to abandon a major portion of the old form layout design and question sequence, and begin with a fresh approach, so that questions and answers on the punched card forms would still be visible after card punching had taken place. The degree of success in this project was in nearly direct proportion to the volume of information that was needed by the ultimate user of each registration form.

In designing questionnaire forms to be used on punched card equipment, perhaps the most important factor to keep in mind is the print size and space that will be reproduced on the final card form. Questions must be very brief, and yet

leave as little room for mis-interpretation as possible. One widely used means to escape the pitfalls of an open answer system is to provide the proper answers, with provision to have the applicable section marked or circled. Unfortunately, many areas of needed information do not adapt themselves to this type of question, so it is necessary to phrase questions as objectively as possible, and provide as much answer room as needed, within space limitations.

Registration Packet

The basic registration packet consists of one of each of the following described registration packet cards coded "1" through "6". A registration packet may also include one or both of the other registration packet cards if the student is a new student, a graduate student, or both.

Study List Card

The study list card, illustrated in Figure 1, is the first card to be found in the registration packet, and is punch coded with a "1" in card column 80. The study list card, when completed, is filed in the Registrar's Office as a record of the classes scheduled by the individual student. Information is also available that will indicate where a student may be contacted, the room number if he is in class, or his local residence address and telephone number. For grade reporting purposes, the name and address of the parent or guardian is also included. In the center section of the

card, where the courses are listed, it may be noted that the numbers that are included within the limitations of the horizontal rulings are punch registration figures, which happen to give the number of courses for which a student is registered, but do not mean the period number, or give the time at which the class meets. The class meeting times, for lecture and laboratory sections are listed separately for each class scheduled.

ALPHA SEQUENCE NO.		DO NOT WRITE ABOVE THIS LINE										YR.	VEY	SEX	RES.	CODE	REG.	FREE	VETERAN <input type="checkbox"/> YES <input type="checkbox"/> NO		VETERANS CHECK WHERE APPLICABLE: <input type="checkbox"/> WORLD WAR II <input type="checkbox"/> REHABILITANT <input type="checkbox"/> KOREA <input type="checkbox"/> BENEFITS EXPIRED				PERM. STUDENT NO.
(PRINT) LAST NAME			FIRST			INITIAL		DEGREE FIELD & YEAR			MAJOR SUBJECT			NAME OF PARENT OR GUARDIAN (SPECIFY)											
DENTON ADDRESS						TELEPHONE NO.		DATE		REGISTRAR'S COPY			PARENT OR GUARDIAN'S COMPLETE ADDRESS												
1 DEPARTMENT OF SUBJECT		COURSE NO.		SECTION	CREDITS	LECTURE		LABORATORY		ROOM		INSTRUCTOR		O.K.		80									
2		3		4	5	6		7		8		9		0		1									
3		4		5	6	7		8		9		0		1		2									
4		5		6	7	8		9		0		1		2		3									
5		6		7	8	9		0		1		2		3		4									
6		7		8	9	0		1		2		3		4		5									
7		8		9	0	1		2		3		4		5		6									
8		9		0	1	2		3		4		5		6		7									
9		0		1	2	3		4		5		6		7		8									
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5		6		7	8	9		0		1		2		3		4									
6		7		8	9	0		1		2		3		4		5									
7		8		9	0	1		2		3		4		5		6									
8		9		0	1	2		3		4		5		6		7									
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3		4		5	6	7		8		9		0		1		2									
4		5		6	7	8		9		0		1		2		3									
5		6		7	8	9		0		1		2		3		4									
6		7		8	9	0		1		2		3		4		5									
7		8		9	0	1		2		3		4		5		6									
8		9		0	1	2		3		4		5		6		7									
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4		5		6	7	8		9		0		1		2		3									
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6		7		8	9	0		1		2		3		4		5									
7		8		9	0	1		2		3		4		5		6									
8		9		0	1	2		3		4		5		6		7									
9		0		1	2	3		4		5		6		7		8									
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1		2		3	4	5		6		7		8		9		0									
2		3		4	5	6		7		8		9		0		1									
3		4		5	6	7		8		9		0		1		2									
4		5		6	7	8		9		0		1		2		3									
5		6		7	8	9		0		1		2		3		4									
6		7		8	9	0		1		2		3		4		5									
7		8		9	0	1		2		3		4		5		6									
8		9		0	1	2		3		4		5		6		7									
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3		4		5	6	7		8		9		0		1		2									
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6		7		8	9	0		1		2		3		4		5									
7		8		9	0	1		2		3		4		5		6									
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7		8		9	0	1		2		3		4		5		6									
8		9		0	1	2		3		4		5		6		7									
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5		6		7	8	9		0		1		2		3		4									
6		7		8	9	0		1		2		3		4		5									
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Student Personnel Card

The student personnel card is also a card which has questions printed on the front (see Figure 2), and the back (see Figure 3). The student personnel card, when completed, is kept in a file by the Dean of Men, or the Dean of Women, as appropriate. In addition to the distinguishing color stripe at the top of the card, a "2" is punched in card column 80 for mechanical collating and separation. In order to provide for different types of information needed by the Dean of Men and not needed by the Dean of Women, it was necessary to provide one section on the reverse side of the student personnel card to be filled in by men students only.

IBM 16703-4 STUDENT PERSONNEL CARD

ALPHA SEQUENCE NO	STUDENT NAME	YR	VET	SEX	RES CODE	REG	FREE	PERM. STUDENT NO.
-------------------	--------------	----	-----	-----	----------	-----	------	-------------------

MARITAL STATUS:

SINGLE MALE VETERAN

MARRIED MALE NON-VETERAN

SINGLE FEMALE

MARRIED FEMALE

FR. SOPH. JR. SR. GRAD. SPL. DATE OF BIRTH _____

CLASS (CIRCLE ONE) DAY MONTH YEAR 0

MAJOR STUDY _____

ACCOUNTING, ART, EDUCATION, ETC

PROFESSIONAL CONCENTRATION
OR TEACHING FIELD _____

NUMBER OF SEMESTER HOURS SCHEDULED _____

DO YOU WORK PART TIME? _____

IF SO, WHERE? _____

HOURS EMPLOYED PER WEEK _____

WHAT IS YOUR HOURLY RATE OF PAY? _____

PARENT OR GUARDIAN _____

FIRST NAME MIDDLE INITIAL LAST NAME TELEPHONE NO. _____

ADDRESS OF PARENT OR GUARDIAN _____

STREET NO. STREET CITY STATE OR FOREIGN COUNTRY _____

STUDENT'S DENTON ADDRESS _____

STREET AND NUMBER OR DORMITORY NAME TELEPHONE NO. N.T. BOX NO. _____

DORM DIRECTOR OR HOUSEMOTHER'S NAME _____

PERMISSION TO MOVE DURING THE SEMESTER MUST BE OBTAINED IN ADVANCE FROM THE APPROPRIATE STUDENT DEAN.

DO NOT FOLD, BEND, OR MUTILATE THIS CARD

OVER

NORTH TEXAS STATE COLLEGE

ALPHABETIC SEQUENCE NO	PERMANENT STUDENT NO	SEX	YR	VET	RES CODE	REG	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR NO	YR	STATE	COUNTY	CITY	VET	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR NO	YR	STATE	COUNTY	CITY	VET	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR NO	YR	STATE	COUNTY	CITY	VET	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR NO	YR	STATE	COUNTY	CITY	VET	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR NO	YR	STATE	COUNTY	CITY	VET	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR NO	YR	STATE	COUNTY	CITY	VET	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR NO	YR	STATE	COUNTY	CITY	VET	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR NO	YR	STATE	COUNTY	CITY	VET	FREE	CURRENT SEM YEAR	CURRENT SCH YEAR	STUDENT NAME	ENTRY DATE SEM YEAR	MAJOR 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<p style="text-align: center;">INFORMATION BELOW TO BE SUPPLIED BY</p> <p style="text-align: center;">MEN ONLY</p> <p>IF MARRIED, IS WIFE IN SCHOOL? _____</p> <p>NUMBER OF CHILDREN _____</p> <p>NO. OF DEPENDENTS LIVING WITH YOU NOW _____</p> <p>DO YOU RENT _____ ROOM - APARTMENT - HOUSE <small>(CIRCLE ONE)</small></p> <p>NAME OF LANDLORD _____</p> <p>DO YOU COMMUTE? _____; IF SO, HOW _____</p> <p>IF YOU OWN A CAR, GIVE: MAKE _____ YEAR _____ LICENSE NO. _____</p> <p>ARE YOU A MEMBER OF THE ROTC? _____</p> <p>LIST HIGH SCHOOL OR COLLEGE ATHLETIC TEAMS ON WHICH YOU PLAYED, AND POSITION: _____ _____</p> <p>NAME OF FRATERNITY _____</p>	<p style="text-align: center; border: 1px solid black; display: inline-block; padding: 2px;">RECORD OF STUDENT ACTIVITIES</p> <p><small>THIS RECORD WILL PROVIDE A HISTORY OF YOUR EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS. IT IS AN IMPORTANT SUPPLEMENT TO YOUR SCHOLASTIC RECORD.</small></p> <p>WERE YOU REGISTERED HERE LAST SEMESTER? YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>IS THIS YOUR FIRST SEMESTER HERE? YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>IF YOU ARE A TRANSFER STUDENT, WHAT COLLEGE DID YOU TRANSFER FROM? _____</p> <p><small>LIST BELOW YOUR STUDENT ACTIVITIES FOR THE LAST SEMESTER REGISTERED, UNLESS MEMBERSHIP AND OFFICES HELD IN FRATERNITY, SOCIETY, AND OTHER STUDENT ORGANIZATIONS.</small></p> <p>_____ _____ _____ _____</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="font-size: 1.5em; margin: 0;">OVER</p> <p style="font-size: 0.8em; margin: 0;">DO NOT FOLD OR BEND THIS CARD</p> </div>
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Fig. 3--Reverse of sample student personnel card

Dean's Information Card

The dean's information card is used for two purposes in the registration packet. Figure 4 illustrates how, with a "3" punched in card column 80, and with a salmon stripe at the top, the card is used to provide a file in the office of the Vice-President for every student enrolled for the current semester. Figure 5 shows the same card form (printed from the identical electroplate), but with the digit "4" punched in card column 80, and with a green stripe at the top of the card. This card is filed in the office of the academic dean during each semester. In order to facilitate checking student records by representatives of the various departments, the cards are filed alphabetically by department within the School

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Fig. 4--Sample dean's card for the Vice-President

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Fig. 5--Sample dean's card for academic deans

The church census card secures the same items of information which were previously gathered on a locally printed four by six inch card.

Student Data Card for News Service

The news service card, illustrated in Figure 7, replaces a four by six inch card, locally printed, with questions on two sides. In the registration packet, the news service card is identified by having a brown stripe across the top of the card, and has a "6" punched in card column 80. As indicated by the name, this card is primarily used for news releases on students by the College News Service. Another usage for the card, and one which resulted in a reduction by one card from the old registration materials, is that the College

ALPHA SEQUENCE NO.		STUDENT NAME										YR	YET	SEX	RES CODE	REC	FREE	PERM. STUDENT NO.		
DENTON ADDRESS					TELEPHONE NO.			N. T. BOX NO.		HIGH SCHOOL FROM WHICH YOU GRADUATED					NAME		YEAR			
FR. SOPH. JR. SR. GRAD. SPL.		MAJOR STUDY (ACCOUNTING, ART, EDUCATION, ETC.)										WHAT OTHER COLLEGE(S) HAVE YOU ATTENDED?								
HOMETOWN:										WHAT DEGREES DO YOU HOLD?				WHAT DEGREES ARE YOU WORKING TOWARD?						
MR. AND MRS. MRS.		CITY			COUNTY			STATE			LAST TEACHING POSITION:		CITY		STATE		SCHOOL		DATE	
PARENTS:		FIRST NAME			MIDDLE OR INITIAL			LAST NAME			LIST ORGANIZATIONS OF WHICH YOU ARE A MEMBER AT NTSC:									
PARENTS ADDRESS: STREET AND NUMBER					CITY			STATE			OTHER FACTS WORTH NEWSPAPER MENTION									
YES <input type="checkbox"/>		HUSBAND																		
NO <input type="checkbox"/>		OR WIFE:																		
MARRIED?		NAME			ADDRESS															
HOMETOWN NEWSPAPER(S)																				
COUNTY SEAT NEWSPAPER																				
ALPHABETIC SEQUENCE NO.	PERMANENT STUDENT NO.	STUDENT NAME	ENTR. DATE	MAJOR	BIRTHDATE	RESIDENCE	CITY	CURRENT	REC	CC										
1 2 3 4 5	6 7 8 9 10 11	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	35 36 37 38 39	40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78	79 80	81 82 83 84 85 86 87 88 89 90	91 92 93 94 95 96 97 98 99												
IBM 850447																				

Fig. 7--Sample student data card for news service

electroplate made. There is no stripe at the top of the card at this time, although if the form is standardized, there undoubtedly will be. The card is identified mechanically by a "7" punched in card column 80. Figure 8 is an illustration of the present graduate information card.

A graduate information card is placed in the packet of every student who has received a baccalaureate degree, even though he indicates that his course of study will not lead to a higher degree.

New Student Information Card

The new student information card shown in Figure 9 is also at present a local over-print of a standard blank tabulating card form, and as such has no top color stripe, but

Surname Other Names—Miss, Mrs., or Mr., (Print in full)		Home Address		Street and Number or RFD		City	State	County
Age	Date of Birth	Place of Birth	State	County	Name of Parent or Guardian	Address	Occupation	
From what High School were you graduated?			When		Grade of Texas State Teachers Certificate held, if any			
How many years have you taught?			List above colleges attended, other than N.T.S.C., with dates of attendance for each					
Member of what church?				If not a member, what church preferred?				

Fig. 9--Sample new student information card

it is identified mechanically by an "8" punched in card column 80. A new student questionnaire is placed in the packet of every student where the application for admission would indicate the student had never entered as a regular, correspondence or extension student at North Texas State College, and would not have a permanent record card in the files. Because of the limited usage this card receives, it may well be that this card form will continue to be an over-print rather than an electroplate printed card.

The information on the new student information card is approximately the same as that on the reverse of the Registrar's copy of the previously used McBee Keysort study list card. The study list card and the new student information cards were separated and the loyalty oath included on the reverse of the study list card for two reasons. First, in order to prepare permanent records for new students, it required that schedule cards be removed from the Registrar's Office, leaving an incomplete file of in-school students, which created an unsatisfactory situation. Second, since the state law requires the loyalty oath to be administered and the certificates filed where they can be audited, an automatic filing remedy was created by having the oath on the reverse of the study list card. The study list card also bears the amount of fees paid and the receipt number on which they were paid, which allows for quick and positive auditing and verification.

Class and Grade Cards

Class and grade cards were developed to allow gang-punching of practically every item of information needed. The information which identifies the individual student is contained in card columns 1 through 34, and is in identical sequence with the same information contained in the master enrollment card, and all cards in the registration packet. The portion of the card which contains the items which pertain to the individual class; such as department code, department, subject number, section, subject title, number of semester hours, hours per week to be spent in lecture, hours per week to be spent in laboratory, and a graduate credit indication are all gang-punched prior to actual registration time. The exact process will be explained in detail in a later chapter.

The card is so designed to serve as a class card during registration time, and a final grade card at the end of the semester. The section on the left side of the card was designed to help with the assignment of grades which depend upon the date of occurrence, and to assist in auditing class enrollment. If no date appears in any of the designated blocks, the student may be presumed to have registered for the particular course during regular registration time, and has made no changes since that time. If, however, the student is a late registrant, the date of the late registration would be stamped in the appropriate block. In the same manner, if

the student transferred into the section, added the course after the beginning of the term, dropped the course, or withdrew from school, the effective date would be stamped in the appropriate date block.

Since the registration regulations at North Texas State College provide that any undergraduate student may not receive a graduate credit class card in the registration line, and since some undergraduate students may carry courses for graduate credit, the last date block has been added for such a purpose. In practice, for ease of identification, undergraduate class cards are printed on manila colored cards, with no top or other stripe, as illustrated in Figure 10. Class cards which carry graduate credit are prepared on cards

CLASS AND GRADE CARD	STUDENT'S PERMANENT STUDENT NUMBER IN THE SPACE ABOVE.	LETTER GRADE (A,B,C,D, ETC.)
	MAKE NO OTHER MARKS ON THIS CARD	SIGNATURE OF INSTRUCTOR
WRITE TITLE OF SPECIAL PROBLEM COURSE OR COMPLETED THESIS ABOVE	DO NOT FOLD, BEND, CLIP, OR MUTILATE THIS CARD	TO INSTRUCTORS : FINAL GRADES ARE DUE IN THE REGISTRAR'S OFFICE WITHIN 24 HOURS AFTER THE FINAL EXAMINATION. ALEX DICKIE REGISTRAR
LATE REGISTRATION	DEPARTMENTAL TRANSFER IN	DEPARTMENTAL TRANSFER OUT
ADD	DROP	WITHDRAWAL
GRADUATE CREDIT AUTHORIZED (SENIORS ONLY)		
ALPHABETIC SEQUENCE NO.	PERMANENT STUDENT NO.	DEPT. CODE
DEPT. CODE	DEPT.	SUBJECT NO.
SECTION	STUDENT NAME	SUBJECT TITLE
SEM. HRS.	SEM. HOURS	GRADE
POINTS	LECTURE	HOURS LAB.
CURRENT YEAR	NEW YEAR	G.C.

Fig. 10--Sample undergraduate class and grade card

Grade Reports

The grade report forms to be included in this discussion are the teacher's grade report, the student grade report, and the mid-semester probation report.

Teacher's Grade Reports

Teacher's grade reports are used to provide a permanent record of all grades reported by instructors for each long session semester or summer term. The reports for each semester or term are bound into an individual volume for future reference. The teacher's grade report is the official record of grades, and the grades reported therein are considered to supersede any different grades that may be found on the final grade cards. Exceptions may be made in case of obvious discrepancies, but then only upon written notice from the instructor who signed the individual grade report.

The heading section of the teacher's grade report form is used to provide positive identification of the course taught, and the materials used in conjunction with the course. Certain class enrollment statistics are also included on each page of the report.

The main body of the teacher's grade report is a report of each individual student who was enrolled for the course, even though each student may not have completed the course. The items reported upon include the grade received, the number of semester hours credit to be received, the number

of absences, and if so desired by the instructor, remarks may be included.

The teacher's grade report shown in Figure 12 was only altered very slightly in the heading, as compared to the previous form used, to allow for mechanical printing of portions of the department, subject number, and possibly the subject title. The printing of the subject title is determined by two factors. First, the number of co-selector positions that are available in the accounting machine, and second, the degree of clarity that can be reached in limiting subject titles to approximately eighteen or twenty letter spaces.

The main body of the teacher's grade report form was designed to allow for exactly fifty students, since this number will accommodate nearly all classes, with few exceptions, such as large lecture sections in beginning science classes. The number in the left column allows a quick check of the number of students in the class for verification purposes. The student name is printed from the class cards, last name first, and in alphabetical order. The sequence number column is used for the permanent student number, as a further means of identification in case of students with completely identical names. The class column is printed by the accounting machine during preparation of the report before submission to the instructors, and is the college classification of the student. The number of semester hours for which the student

North Texas State College

REPORT OF TEACHER

Fill in detail and file in Registrar's Office with grade cards not later than twenty-four hours after final examination of this class.

DEPT.	SUBJECT NO.	SUBJECT TITLE	SEM. HOURS	LEC. WEEKLY HOURS	LAB. HOURS	SEM. YEAR
TEACHER			NUMBER IN CLASS:	MEN	WOMEN	TOTAL
BASIC TEXT USED:			12TH CLASS DAY			
SUPPLEMENTARY WORK:						
SIGNATURE:			END OF SEMESTER			

Grading System: A (90 to 100); B (80 to 90); C (70 to 80); D (60 to 70); E. Condition; F. Failure; Q. Quit course; X. Incomplete; W. Withdrawn from school before mid-semester; WP. Withdrawn from school after mid-semester with passing grades; WF. Withdrawn from school after mid-semester with failing grades; WX. Withdrawn from school after at least two-thirds of semester. Permission to receive grade of WX must be obtained from dean of student's school or college. Under remarks give date of grade of Q, W, WP, WF, WX. Also give reason for E or X. Do not write outside of lines.

Note: A student belongs to a class from the time he enters until the close of the semester unless the teacher receives from the Registrar's Office or the Dean's Office a drop card or a withdrawal card. If a student classified as a senior is to receive graduate credit on a course, please indicate this in the "Remarks" column below.

1	STUDENT NAME	SEQUENCE NUMBER	CLASS	GRADE	SEM. HOURS	ABSEN- CES	REMARKS
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
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33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

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Fig. 12--Sample teacher grade report

is enrolled is also entered by the accounting machine from the class card which was picked up by the student during registration. The letter grade, number of absences, and remarks, if any, are all entered by the instructor prior to returning the teacher's grade report and the accompanying class cards to the Registrar's Office.

Student Grade Reports

Prior to the mechanization of the registration records at North Texas State College, the grade report to the student was made by tearing off a copy of the McBee Keysort class card, inserting the copies in an envelope, and filing the envelopes prior to delivery to the individual student. The use of punched card equipment eliminated the need for such a cumbersome system of preparing grade reports. After all the grades have been received from the instructors for a given semester, the grade cards are sorted into permanent student sequence, and an individual grade report is prepared for each student, much in the same way a check would be prepared.

The student grade report, as illustrated in Figure 13, is designed in two equal halves. The upper half contains a heading, and a detailed explanation of letter grades and the grade point system, as well as space for a three or four line address which is printed in such a position as to allow the use of a window type envelope. The lower half of the form is used to list the individual courses scheduled, with the

GRADE REPORT
NORTH TEXAS STATE COLLEGE
DENTON, TEXAS

EXPLANATION OF GRADES, GRADE POINTS, ETC.

1. GRADES: Letter grades have the following significance:

A (Excellent); B (Good); C (Fair); D (Passing); E (Condition); F (Failure); Q (Drop); X (Incomplete); W (Withdrew before mid-semester); WF (Withdrew after mid-semester, failing); WP (Withdrew after mid-semester, passing); WX (Withdrew last third of semester with special permission. WX can be removed).

2. GRADE POINTS: Grade Points are assigned on the following basis:

A, Three points per semester hour; B, 2; C, 1; D, X, E, and F, Zero. An average of one grade point is required for each semester hour offered for a certificate or degree.

SUBJECT NUMBER	DESCRIPTIVE TITLE	SEM.	SEM.	GRADE	HRS. PER WEEK	
		HOURS	GRADE	POINTS	LEC.	LAB.

ALEX DICKIE, REGISTRAR

Fig. 13--Sample student grade report

semester hours credit, the letter grade received, the number of grade points, and the number of lecture and laboratory hours per week for each course. There are seventeen possible printing lines in the lower half of the student grade report, however one line is used to print the inclusive dates of the semester for which the grade report is being issued, and one printing space is also used to print the total number of semester hours passed and the grade points earned, so there are actually only fifteen available spaces for individual grades. This has proved to provide ample space. The average student will carry only five or six courses, but in some areas, particularly music, it is frequently possible for a student to have carried some twelve different courses during the semester.

The form of the student grade report was designed for economy at the time of purchase, as well as speed of operation, so two opposing factors were brought together in the form. For speed of operation, it is necessary that the space between areas of printing never exceed three and two-thirds inches, or it will become mechanically necessary to delay the printing operation until the paper can be positioned. By use of a predetermined total line near the bottom of the second half of the form, the maximum distance rule for free-skipping of the form can be maintained, and the preparation of student grade reports can be accelerated by approximately 10 per cent. Commercial printing companies that specialize

in the preparation of continuous forms to be used on punched card accounting machines will offer better prices on forms that will be perfectly aligned with their standard stock of paper sizes for width, and the printing press cylinder size, or multiples thereof for paper length. For these reasons, the gross paper length of the student grade report was established at seven inches.

The student grade report is ordered to provide an original and three carbon copies of the form. The original copy is furnished to the parents of minor students. One copy is given to every student for his information and to be used during the next registration, so it may be used in addition to the last prepared dexigraph of the permanent record to provide up-to-date information on each student. One copy of the grade report is maintained by the Dean of Men, or the Dean of Women, as appropriate, for their records and information. The final copy is used as a Registrar's Office file copy and is available to other administrative offices for checking purposes.

Probation Reports

Probation reports are prepared at the end of the mid-semester for students who are reported failing in any subject. The accounting machine-prepared form replaced a three by five inch typewritten card form, and so the new form, illustrated in Figure 14, was almost entirely free from previous form layout influence.

NORTH TEXAS STATE COLLEGE
DENTON, TEXAS

PATENTED—MOORE BUSINESS FORMS, INC., DENTON, TEXAS *

DEPT. AND SUBJECT	SUBJECT TITLE	REASON

STUDENT:

THIS IS NOTICE THAT YOU ARE REPORTED AT THIS TIME AS DOING UNSATISFACTORY WORK IN THE COURSES INDICATED.

A. M. SAMPLEY
Vice-President

- ★ REASONS: 1. Absences 2. Lack of Study 3. Outside Work
4. Weak Background 5. Lack of Aptitude 6. Other

Dear Student:

If you are reported in two or more courses, you are expected to confer with the Counselor in Room 119, Education Building, at a period when you have no classes in accordance with the hours listed below:

9:00 A.M. to 12:00 noon 1:00 P.M. to 4:00 P.M.

If you are reported in only one course, you are invited to confer with the Counselor at one of the periods indicated above, or by appointment, and to come by this office to talk with me at any time.

Sincerely yours,
A. M. SAMPLEY
Vice-President

Fig. 14--Sample probation report

The student's name is printed from the class card for the first course in which the student is reported failing. At the same time the descriptive information for that particular course is printed. The student's name is then prevented from being printed from any subsequent class cards for courses in which the student may be failing. The name and address file used in connection with the preparation of student grade reports is utilized to address the probation reports, again allowing the use of window-type envelopes without having to type individual addresses. The probation report form is prepared in two copies, one for the parent or guardian of the minor student who is reported as failing, and the second copy for the student concerned.

Permanent Records

Permanent records are forms which are used to consolidate the individual semester or summer term grades for each student during the course of his academic career. Since the record is handled frequently during the several-year period which the average student is in attendance, and since the record must withstand storage for a much longer period after the student leaves college, the paper quality of the form is quite high.

The permanent records at North Texas State College are printed on forms which are twelve and one-quarter inches wide, and nine and three-quarters inches high, so as to make the

maximum utilization of file drawer capacity. The form was so designed initially that all miscellaneous admission data for each student were entered in a column approximately three inches wide on the left side of the front of the form. The same amount of space was left on the right side of the reverse of the card for notations as to dates copies of the record had been made, when teaching certificates were issued, and data of like nature. The balance of the space was divided into two equal columns for posting grades. When typewriters were used, this gave sufficient space for the entry of grades, but with the advent of the punched card accounting machines, and their use for posting permanent records, it became necessary to design a card that would provide more descriptive space for each course.

The newly designed card, shown in Figure 15, utilizes the full width of the record for the posting of course grades, with spaces for entrance data and miscellaneous notations taken across the full columnar width. Thus, after allowing for columns in which to print subject number, semester hours, semester grades, grade points, and the hours per week spent in lecture and laboratory, which consumed the same amount of space on both the old and new permanent record design, it was possible to extend the descriptive title section from eleven type spaces on the old record to twenty spaces on the new record form. The old records are not being transcribed onto the new forms, but their use has been stopped,

so they will be replaced gradually as the student body changes. This will entail the use of two separate control panels with which to post the final grades to the permanent record cards, and the old and new cards have to be posted in separate groups, but this is a negligible amount of work compared to what would be involved if an attempt was made to convert all records to the new permanent record form.

Master Enrollment Card

The master enrollment card is designed to follow the basic principle that all information desired in the registration packet cards may be gang-punched or reproduced on a column for column basis. Some of the columns on the right of the card have had their uses changed, while others have had uses assigned since the electroplate was made. Figure 16 illustrates the master enrollment card as it is currently used.

ALPHA SEQUENCE		STUDENT NAME										YR	VET	SEX	RES	CODE	REC	PRE	PERM. STUDENT NO.
ORIG SEM	YEAR	MO	YEAR	STATE	COUNTY	CITY	SEM	YEAR	MAJOR	DEG	CAND	N	T	DEGREE					
ENT	ENTRY DATE	BI	TH	DATE	RESIDENCE		CURRENT												
0																			
1																			
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	
39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	
58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	
77	78	79	80																

IBM 850448

Religious Preference
Semester Hours Scheduled
Sem. Hrs. Beg. of Sem.
Sem. Hrs. During Sem.
Sem. Hrs. End of Sem.
Grade Pt. Beg. of Sem.
Grade Pt. During Sem.
Grade Pt. End of Sem.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

NORTH TEXAS STATE COLLEGE

Fig. 16--Sample master enrollment card

CHAPTER III

PROCEDURES PRIOR TO REGISTRATION

The actual chronological period covered by this chapter will vary somewhat from one semester to another, depending upon the work load of the individual year, and the semester being prepared for. Since the major influx of new students is felt during the fall semester, it is necessary to have more time to make adequate preparations for their enrollment than would be necessary for the relatively smaller number that will enter college for the first time in either the spring semester or the summer school session. The preparation for the fall semester will ordinarily begin a minimum of four weeks in advance of the first day of freshman orientation, which is also the first day on which packets are distributed to students for the fall registration.

Master Enrollment Card Preparation

Applications for admission are received in the Tabulating Department from the Registrar's Office, and a master enrollment card is prepared for each prospective student. The fields of information which are punched into each master enrollment card are:

Alphabetic Sequence Number

The alphabetic sequence number is a number which is arbitrarily assigned to be used in keeping the student in alphabetic arrangement, last name first, with his fellow students.

Permanent Student Number

The permanent student number is assigned in a simple numeric series to identify one individual student, as a mechanical means of control. This number will remain assigned to the student during his entire academic career at North Texas State College. If a prospective enrollee should not enter, then the number would be reassigned.

Original Entry

Any student entering North Texas State College for the first time as a high school graduate is designated with a "1" while college transfers are indicated with a "2". This identification is dropped for the second and any succeeding semesters for which the student may enroll.

Sex

Sex and marital status are indicated in a single card column by coding single men with a "1", married men with a "2", single women with a "3", and married women with a "4".

Classification

The normal classification of "1", "2", "3", and "4" to signify freshman, sophomore, junior, and senior students is

supplemented with the use of "5" to designate any student who has received a baccalaureate degree, even if the student is not working toward a graduate degree. A student working on a doctoral program is designated with a "6" in the classification column on the master enrollment card.

Student Name

The name of each student is punched, last name first, and then first and middle names are punched as far as possible within a twenty space limitation. This will cut short many middle names, and some first names, but has provided ample student identification. A further safeguard is present in the form of the permanent student number, to prevent loss of identity where students may have identical names.

Entry Date

Entry date is the semester and year in which a student first attends North Texas State College. The fall semester is indicated with a "1", the spring semester with a "2", and either term of the summer session is indicated with a "3". The last two digits of the academic year which begins in September and ends in August are used for the year. Thus, a student who entered North Texas State College for the first time in September of 1955 would be coded "156".

Major

The various departments have been assigned a two-digit code number which is used to designate the major study area

indicated by students on the application for admission. A complete list of the major codings as used in master enrollment card preparation is included in the section on statistical coding. By sorting on the tens column of the major code, it is possible to separate all students by school or college, as well as the separation into department order by sorting both columns of the major code.

Birth Date

The exact date of birth is not needed for most mechanical purposes, since it is used mainly to provide further identification of a particular student, and to see if a student was twenty-one years of age at the beginning of a given semester, which will determine whether or not the final grades for the semester will be sent to the student's parents.

Residence

A standard residence code for state, county and city location of the student's home is utilized in this field of the master enrollment card. The code provides a number for every town or city in the United States which has a population of 2,500 or more. The coding is arranged in such a manner that each section of the code when sorted by that arrangement alone will arrange the cards in alphabetic sequence by the desired code section. A typical example would be the coding for a student who was a resident of Dallas, Texas at the time of his entrance into North Texas State College.

His residence code would be 42 (Texas) 113 (Dallas County) 250 (City of Dallas). Only the state of residence is interpreted on the top line of the registration packet cards to help the fee takers in the registration line determine which students are required to pay out of state tuition fees.

Veteran Status

If a student is a veteran of federal service, some designation will be punched into this column, while the column will remain blank for non-veteran students. At the present time, any federal veteran who is not attending college under some federal aid bill is coded with a "1", veterans attending college under the provisions of Public Law 16 are coded with a "2", veterans attending college under the provisions of Public Law 346 are coded with a "3", veterans attending college under the provisions of Public Law 894 are coded with a "4", and veterans attending college under the provisions of Public Law 550 (Korean veterans) are coded with a "5". In this manner, although some of the classifications will in time cease to have any significance for that current semester, there is room to add any new categories as they may be needed. In the meantime, it is possible, by running the cards through the sorter one time, to separate all the veterans by type, or by the use of the sort suppression device, to pull all veterans from the total student enrollment.

Free Tuition Students

Any student who is eligible to attend a Texas college on a tuition free basis will have the symbol for his type of exemption punched in this column.

Current Semester and Year

The current semester and year is coded in exactly the same manner as the entry date semester and year, but the current date is not punched in the cards until after registration. In this manner, if a student should apply for admission to North Texas State College for the summer session, and for some reason fail to enroll then, but did enroll in the fall semester, the original registration packet could be used for this student.

Degree Candidate

This card field was originally set up to be used to classify the graduation candidates by the type of degree sought, but is in the process of being re-done to provide some other codings that will provide information for which there is more demand. It is currently planned that an indication of religious membership or preference and the denomination will be punched in the first two columns as soon as the admission blanks are redesigned to provide the necessary information. The second two columns will be used to punch the number of semester hours scheduled by the student during the current semester. These data will be punched after the period for course adds and drops has passed.

North Texas Degree

The codings actually used in this card field are also included in the section on statistical codings. They provide a quick means of separating graduate students on degree type, and if the degree was received at North Texas State College or at some other institution.

Semester Hours Beginning of Semester

This information is maintained for all undergraduate students, but not for graduate students. When a student begins as a freshman, this card field is punched with zero semester hours credit as of the first of the semester. For transfer students, the number of transferable semester hours is punched in this field. As a student continues in school, the number of semester hours credit from the last of the previous semester is transferred to this card field to maintain a running total of semester hours credit for each student.

Semester Hours Earned Current Semester

This information is summary punched into the master enrollment card after the final grades for the semester have been received and the final grade report for the student has been prepared. The number of semester hours passed with a creditable grade are the only hours included in this calculation, so there may be a difference in the number of hours carried during the semester and the number of hours earned. At North Texas State College, only those hours with a letter

grade of "A", "B", "C", or "D" are included in the hours earned during the current semester.

Semester Hours End of Semester

This is merely the addition of the number of hours at the beginning of the current semester plus the hours earned during the current semester. At the present time, North Texas State College does not have a punched card calculating machine which would add the columns and punch the result in the same card, so an alternate method is used. The master enrollment cards for the semester concerned are fed through the accounting machine and by the use of the total transfer method, the hours as of the beginning of the semester are totaled to equal the semester hours credit as of the end of the semester. This figure is equivalent to the number of semester hours credit as the beginning of the following semester, so the master enrollment cards for the following semester (which may actually be in session when this is done), are fed through the summary punch, and the totals for the beginning of the semester are punched in these cards. At the end of the summarizing run, the two groups of master enrollment cards are sequence checked and the totals are transferred to the master enrollment cards for the original semester, with the columns of punching changed so the totals are punched as the end of the semester figures.

Grade Point Credit Beginning of Semester

This information is handled in exactly the same manner as the semester hours information, and is prepared at the same time; again for undergraduate students only.

Grade Point Credit Earned Current Semester

This information is accumulated at the same time the semester hours earned for the current semester are accumulated, but in this case the letter grade would determine the number of grade points which would have been earned, so only letter grades of "A", "B", or "C" would have grade point credits to accumulate.

Grade Point Credit End of Semester

This calculation is handled in exactly the same manner and at the same time the semester hour credit for the end of the semester is calculated.

Permanent Number Assignment

Permanent student numbers are assigned in a straight numeric sequence to any student who enrolls in North Texas State College. The permanent number system was started at the same time the college started using the punched card registration system. The numbers were originally assigned to the master enrollment cards which had been prepared for all prospective students for the fall semester of 1954 (the first semester the mechanized registration system was used at North Texas State College).

The only exception to the general rule of straight numeric sequence assignment of permanent student numbers is the reassignment of numbers which were assigned to students who applied for admission to North Texas State College and failed to register. Periodical checks are made of the permanent student number file, and if any number has not been used since its original assignment, that number is assigned to a new incoming student. In practice, it has worked out that very few numbers have to be reassigned after the mechanized system has been in operation. However there were a large group of permanent numbers available for re-use at the end of the first semester, since the initial preparations included any student who had been enrolled at North Texas State College during the previous school year, as well as the new applicants for the 1954 fall semester.

Master enrollment cards with the next series of permanent student numbers to be assigned are maintained in a working file, and when applications for enrollment are being processed, the individual student information is punched in the pre-numbered master enrollment card.

Alphabetic Sequence Number Assignment

The card field in the master enrollment card allows for an alphabetic sequence number with a maximum of five digits, or a number of 99,999. In general, depending upon the number of students in the group for which a new alphabetic sequence book is being prepared, an interval of some odd number is

used. At the present time it appears that it will be necessary to assign a new series of alphabetic sequence numbers about every two years. As this is being written, a new alphabetic sequence book is being prepared, with individuals entered in the book spaced on an interval of seventeen units. This will allow for some 5,882 students to be in the number assignment group, and still only run the total alphabetic sequence number to 99,994.

Although the numbers in the alphabetic sequence are assigned on intervals of seventeen digits, in the preparation of the alphabetic sequence book, a skip of five spaces between each entry, or one line per inch, with ten lines to an eleven-inch page has proved to be satisfactory. Of course, if the intervals between numbers were larger in order that the alphabetic sequence book might last a longer period of time, then it might be well to increase the space between the printed lines. Conversely, for larger groups of cards with smaller intervals for number assignment, it might be satisfactory to make the space somewhat smaller. However, to make the book as legible as possible as the names are entered by hand, some extra margin of spacing should be allowed.

The alphabetic sequence book is simply a listing of the alphabetic sequence number, student's name, and permanent student number of each individual student for a given period of time. As new students enter school, they are assigned an alphabetic sequence number as appropriate between the names

immediately before and after the student's name. As the number is assigned, the assigned alphabetic sequence number, student name, and permanent student number are entered in the book in ink.

One simple addition has been of benefit in the preparation of the alphabetic sequence book as used at North Texas State College. During rush times of registration, it is desirable to have the alphabetic sequence book broken into segments for easy reference at the same time by several people. Thus it is easier if the section for a third or a fourth part of the book is started on a new page rather than allowing the overlap of a few names between sections of books.

Statistical Coding

The section of this chapter which described the master enrollment card preparation also contained the actual codings used where there were just a few codes to select from. This section will give in detail some of the actual codings used where the code listings were not included previously.

Academic Major Code¹

10-49 College of Arts and Sciences

11 Art	25 Geography	39 Mathematics
13 Bible	27 German	41 Philosophy
15 Biology	29 Government	43 Physics
17 Chemistry	31 History	44 Pre-Engineering
19 Economics	33 Journalism	45 Sociology
21 English	35 Latin	47 Spanish
23 French	37 Library Service	49 Speech

¹An abstract from the Master Code used by the Tabulating Department, North Texas State College, Denton, Texas.

50-59 School of Business Administration

51 All Business Administration Majors

60-69 School of Education

61 Education

63 Health, Physical Education and Recreation

65 Industrial Arts

67 Psychology

70-79 School of Home Economics

71 All Home Economics Majors

80-89 School of Music

81 All Music Majors

The academic major code allows a statistical analysis of students enrolled for a semester to be analyzed by school or college; by department, or by department within school or college by the use of the above codings. Provision is made for expansion with the creation of new departments within a college, or the re-organization of a school into a college, with the creation of individual departments.

Free Tuition Status Code²

B-Blind

G-Good Neighbors

H-Hazelwood Act (veterans with federal benefits expired)

O-Orphan (graduate of a State Orphans' Home)

R-Rehabilitant (state)

S-Scholarship (high school valedictorian and salutatorian)

North Texas Degree Code³College of Arts and Sciences

100 Bachelor of Arts

105 Bachelor of Science (NEC)

²Ibid.³Ibid.

- 110 Bachelor of Science in Biology
- 120 Bachelor of Science in Chemistry
- 130 Bachelor of Science in Mathematics
- 140 Bachelor of Science in Physics
- 150 Bachelor of Science in Medical Technology
- 160 Bachelor of Science in Library Service

School of Business Administration

- 200 Bachelor of Business Administration

School of Education

- 300 Bachelor of Science in Education
- 310 Bachelor of Science in Physical Education
- 320 Bachelor of Science in Industrial Arts

School of Home Economics

- 400 Bachelor of Science in Home Economics

School of Music

- 500 Bachelor of Music

Graduate School

- 600 Master of Arts
- 605 Master of Science (NEC)
- 610 Master of Science in Biology
- 620 Master of Science in Chemistry
- 630 Master of Science in Mathematics
- 640 Master of Science in Physics
- 650 Master of Business Administration
- 660 Master of Business Education
- 670 Master of Science in Education
- 680 Master of Science in Physical Education
- 690 Master of Science in Industrial Arts
- 700 Master of Music
- 710 Master of Music Education
- 800 Doctor of Education
- 810 Doctor of Philosophy in Music

Degrees from other Colleges

- 001 Any Bachelor's Degree
- 002 Any Master's Degree
- 003 Any Doctor's Degree

Class Card Preparation

Two sets of master class cards are maintained for every course listed in the current college catalog. One set contains the proper lecture and laboratory hours per week for the long semesters and the other set contains the proper lecture and laboratory hours per week for the summer sessions. These master cards are corrected as each new addition, deletion, or change to a course listing is made. In actual practice, the master course cards are referred to quite infrequently, but the past experience has been that the reference is usually made during the rush of registration time, so rather than risk the possibility of incorrect class cards being issued for a course, all section master cards are required to be duplicated from the proper master course card.

In addition to the two sets of master class cards, two sets of master section cards are also maintained, on different color cards to aid in easy identification. There will quite frequently be as many as twenty-five or more master section cards for the same course. The only difference, other than color, between the master class card, and the master section card, is the addition of section number in the master section card.

At some convenient time, usually approximately two months before the beginning of a new semester, an advance copy of the schedule for that semester will be received from the Office of the Vice-President. The file of class cards that

remain on hand from the previous semester is then reviewed in the light of anticipated enrollment, based upon previous experience (as indicated by class size statistics prepared as a by-product of the twelfth day class rolls). The factors above may be modified by possible outside factors, such as legislative action in regard to new course requirements, to determine the quantity of additional class cards that will probably be needed for each section listed on the new schedule.

If any section needs additional cards, the proper section master card is pulled from the file, and a quantity of blank class cards filed behind the master. This process continues throughout the entire class card file, and until all courses and sections of the new schedule have had an estimated number of blank class cards placed behind the proper master section card. The blank class cards are then intersperse gang-punched (an operation whereby the information in each card is transferred to the card following, the only exception being that when a master card is sensed, the information is not transferred to it from the preceding card), mechanically verified, and interpreted.

The punched and interpreted cards are then filed in their proper places behind heavy gauge, third cut, visible index guides. The original cost of these heavy guides was considerably more than the use of machineable cards, but their outstanding wearing qualities and ease of use have made them seem well worth the expense. At this stage the class

cards are held in storage until they are needed during the actual registration process.

Registration Packet Preparation

At some convenient time before the beginning of a new semester, the numbered codes mentioned in Chapter II are punched into the registration packet cards and they are collated into packet groupings. The master enrollment cards for the current semester are sorted on the number of semester hours credit as of the beginning of the current semester and the number of hours scheduled during the current semester which will place the cards in such a sequence that each student's probable classification for the coming semester may be determined. The basic student information is then reproduced into a new master enrollment card with the classification that will be current for the next semester. None of the semester hour or grade point information is reproduced at this time.

The new master enrollment cards are sorted into alphabetic sequence, and separated into graduate and undergraduate groupings. The master enrollment cards are then collated into the proper group of previously prepared blank enrollment packets. It may be remembered that there is an extra card in the packets which will be used by graduate students, so it is necessary at this point to keep the two groups separate. There is also an extra card for each student who is enrolling at North Texas State College for the first time,

so the new students and the continuing students are handled separately, but in the same general manner, with the exception of the number of cards in the registration packet for each. The registration packets are intersperse gang-punched, mechanically verified, and interpreted. They are then placed in a specially prepared registration packet envelope. This envelope is eight and one-eighth inches long, for ease of insertion of the registration cards into the envelope; is three and three-eighths inches high in the back, but is cut to two and fifteen-sixteenths inches high in front to allow the interpretation on the card packet to be seen easily without taking the registration cards from the packet. The packets are stored in a cancelled check cabinet until the time when they are called for by the students to be used in registration.

It has been found to work satisfactorily to issue the packets approximately two weeks in advance of registration to allow the students plenty of time to fill out the information required by the cards, and to spread over a longer time the actual issuance of the packets themselves. With the cooperation of the student body, the quality of the returning registration packet cards has been very good, and the advance transcription of information to the registration packet cards has largely eliminated one bottleneck from the registration line.

CHAPTER IV

REGISTRATION PROCEDURES

This chapter will concern itself with the processes on the day or days of registration and the work of the Tabulating Department for the days following when work procedures are completed as rapidly as time will permit, and yet may be considered to be done as of the completion of the registration hours, or as of certain specified time periods shortly thereafter.

Registration at North Texas State College

Registration at North Texas State College for the average undergraduate student is accomplished in somewhat the following sequence. About two weeks prior to the beginning of the new semester the Tabulating Department makes available the registration packets for the coming semester, so during a break between classes or in an off period, the packet may be picked up, usually without much waiting. During the next several days, the information asked by the registration cards themselves may be answered, so the packet is as complete as possible by the morning of registration day. Texas law requires a loyalty oath of all students at state supported institutions, so the first stop is the Notary Public station in the Howdy Room of the Student Union Building, where the oath on the reverse of the study list card is attested.

The main registration process is carried out in the Library, admission to which is controlled by the student's classification, and the alphabetic location of his last name. Admission times are rotated from semester to semester so no group of students will be registering at the same time for their entire college career at North Texas State College. From the admittance station, the students enter the Periodical Room, where they may fill out the questions on the registration packet cards in case they have not already done so. Exit from the room requires a completely filled out registration packet and proper record by the college Health Service that vaccination certificates are in order.

The next step is in the Main Reading Room where the various departments have schedulers waiting at tables to sign the student for the courses which he wishes to take. Enrolling for a course consists of presenting the study list card and the trial study list (for the student's own use and reference) to the departmental representative. The scheduler okay the study list card and the trial study list, and give the student a class card for the proper course and section. This process is then repeated at the necessary stops until the desired schedule is completed.

A final check out committee will screen the study list card, trial study list and the individual class cards for clerical errors, and to be sure the student is eligible to take any and all courses which he has scheduled. The total

course load is calculated and certified, and the student is ready to pass to the fee takers.

The fee takers will take the study list card on which they enter the amount of fees received and the receipt number which was issued in return. The study list card is kept by the fee taker for balancing purposes. The student then presents the remainder of his registration packet and class cards to a person designated for that purpose and he has completed his registration.

Class Card Processing

As registration progresses, the completed registration packets with their class cards are picked up from the packet takers and delivered to the Tabulating Department. As the packets are emptied, the cards are quickly screened to insure that all cards are turned in the proper direction. This is facilitated by the striping and corner cuts on the registration packet cards, with the class cards having a reverse corner cut. The green stripe dean's card with the "4" punched in card column 80 is placed in the front of the packet contents to act as a master card during the intersperse gang-punching operation for the class cards. All cards are sorted on card column-80 to separate the registration packet into the various types of cards. The green stripe dean's cards and the class cards will fall in pocket "4" as they are both punched the same. These cards are then intersperse gang-punched.

As the cards come from the intersperse gang-punching operation, they are sort separated on the "X" control punch in the class cards. In this manner if any card did not have the "X" punch, or the "X" was not in proper registration, the card will fall into the pocket with the green stripe dean's cards, where the corner cut of the class card will clearly reveal the error. The completed class cards from the sorter are taken to the interpreter to have the student name, alphabetic and permanent student numbers printed on the upper line of the class card. Actual operating experience has shown that if the packets are picked up from the registration line at frequent intervals, and the processed class cards fed to the interpreter as fast as they become available, that even though the interpreter is the slowest operational machine in the installation, there will be no significant delay in the final processing of the first class list by interpreting the class cards as they are received.

As class cards that have been interpreted are accumulated in sufficient quantity, they are sorted to departmental order and held pending receipt of the final group of registration packets as of the close of official registration.

Class List Preparation

When all packets have been received from the registration line, the process described above is continued until all class cards have been intersperse gang-punched, interpreted, and sorted to departmental order. At this time, the cards for

one department are sorted on alphabetic sequence number, section number, and course number. The completed cards are placed in the primary feed of the collator and are sequence checked as tab card headers are inserted from the secondary feed. The header cards have a control "R" in card column 69 to be used in the preparation of class lists and teacher's final grade reports.

The class cards are listed on single copy stock paper ten and five-eighths inches wide by eight and one-half inches long. The header card prints the departmental abbreviation, course and section number. The permanent student number, student name, and number of semester hours for which the student enrolled for the particular course is listed from the class card. Also, a "CR" indication is printed for each student who is taking a course for graduate credit. The accounting machine accumulates the number of men students, the number of women students, and the total semester hours scheduled for each course and section. Totals are also accumulated on a departmental basis for the number of students and the number of semester hours scheduled.

At the end of the twelfth class day, a new class listing is prepared, this time in two copies. The original is forwarded to the department for distribution to the proper instructor, while the copy remains in the Tabulating Department as a reference copy, from which the twelfth day class registration statistics may be prepared. This copy also

serves some miscellaneous purposes, such as determining the number of class cards to prepare for a course for another semester. This listing is also used by the Student Trading Post to assist in preparing their textbook requirements.

Fee Card Preparation

When the study list cards are turned in to the Business Office by the fee takers, they are separated into fee amounts for balancing purposes. While the study list cards are still in fee amount groupings, they are delivered to the Tabulating Department, where a fee card is prepared by reproducing the study list card information into another card, and at the same time, gang-punching in the amount of fees paid, the date paid, and an indication of any special condition that would reduce the amount of fees due. Any stock card form is used at the present time, pending further study on the method of fee taking and the issuing of receipts. This information has proved to be very helpful in auditing for proper payment of fees, particularly out of state tuition. In addition, by having the file of fee cards maintained alphabetically, with the master enrollment cards maintained in permanent student number sequence, a cross check control may be maintained.

Miscellaneous Class Card Processing

One advantage of the system of punched card registration as used by North Texas State College, is the ability to determine as of any given time the status of a student's

registration in any or all of his scheduled studies. Since there are nearly always some changes that will be made in registration status, these changes will be discussed here.

Late Registration

Any registration which is not completed in the regular registration line is considered to be a late registration, requiring the payment of a penalty fee, and the class cards from such a registration will not be included on the first class roll. As late registrants are processed, the date of their late registration is stamped in the proper space on the class card, and the card is filed in its proper sequence for the course and section scheduled. An interim notice is prepared for the instructor authorizing him to allow the student to sit in class, and stating the student will be included on all future class rolls and the final grade report.

Course Adds

Course adds are received from the deans of the various schools on an authorization card, giving the student's name, permanent student number, and the course and section which he wishes to add. The proper class card is pulled from the reserve file, and the student's fee card is pulled from its file. The information in the first thirty-four columns of the fee card is transferred to the class card, which is then interpreted on the upper line. The date of the add is stamped in the proper section of the class card, which is then placed

in sequence in the class section which has been added. A stamp indicating the add card has been processed by the Tabulating Department is placed on the add card, which is forwarded to the proper instructor as his authorization to permit the student to sit in class.

Course Drops

Drop cards are received from the deans of the various schools, giving the student's name, permanent student number, and the course and section which he wishes to drop. The class card for the course is pulled from the file, the date of the drop is stamped in the proper space, and the class card is returned to the file. The drop card is stamped indicating the card has been processed by the Tabulating Department and is forwarded to the instructor, as his notice the student will not be attending class, and should receive a grade of "Q" for the course. The grade of "Q" is a grade for quitting a course, and for this reason the class card must remain in the file until the end of the semester. This system also makes the auditing of the registration records much easier for the state auditors.

Class Transfers

Class transfers may be made without payment of a fee during the first week of a long term or the first two class days of the summer session. Each change of schedule after that time is assessed a two-dollar penalty. No changes may

be made two weeks after the beginning of classes in a long session semester and four days after the beginning of classes in a summer term, except to drop a course.

Departmental transfer slips are received from the various departments showing the student's name, permanent student number, the course and section number from which the student is transferring, and the course and section number to which he is transferring. The class card for the section from which the student is transferring is removed from the file; a new class card for the section to which the student is transferring is pulled from the reserve file. The student information in the first thirty-four card columns is duplicated from the old class card to the new class card. The old class card has the date of the transfer stamped in the "Transfer - Out" space, while the new class card has the date of the transfer stamped in the "Transfer - In" space. The new class card is then refiled in the completed class card file, while the old class card is held in a history file. No further use of the old class card is made other than having a place to check back upon the accuracy of the transactions, and to provide some statistics as to the number of students who make use of the transfer provisions, and the number of times it is used by each.

CHAPTER V

POST-REGISTRATION PROCEDURES

After the twelfth class day rolls are prepared, there is a period during which there is not a large amount of mechanical processing to be done to the class cards for the current semester. It is during this time the permanent record posting for the previous semester is finished, however the detailed procedures for this will be discussed in Chapter VI.

Statistical Reports

At the end of the preparation of the twelfth class day reports, the fee cards are sorted into permanent student number sequence, and matched against the permanent student number file, pulling out the master enrollment cards for those students who have paid fees and are enrolled for the current semester. The fee cards are then sorted back to alphabetic sequence where they may be used for processing class transfers, or general reference.

Total Enrollment Statistics

Total enrollment statistics are accumulated by the use of the card count attachment on the card sorting machine, and are broken down to produce counts of the number of men and women students by each scholastic classification, and

the number of students who are enrolling at North Texas State College for the first semester by men and women for each scholastic classification.

Residence Statistics

The Texas Education Agency requires a report of the number of students enrolled from each county in Texas, as well as the number of students enrolled from each state or foreign country. The master enrollment cards may be quickly separated into Texas and non-Texas residents. The non-Texas resident cards are sorted into state order and several copies of a listing showing the individual student's name and state or country of residence is run. Such listings, in addition to furnishing required data on the individual students, are always much in demand by the Student News Service, and other educational and religious organizations interested in contacting foreign students.

The Texas resident master enrollment cards are sorted into county residence sequence, and sorter counted or tabulated through the accounting machine to arrive at totals by Texas county. These totals are not separated by men and women although they could be if necessary.

Enrollment by Major

The dean's information card, with the green stripe is used to provide this information. The cards are sorted by the major code which was an expression of the student's major

at the time the original master enrollment card was prepared. The major groups are scanned to pull out any students who may have changed their major since their original master enrollment card was punched. The notation of the needed change is made on the proper master enrollment card so it can be made at a convenient time. The cards are then counted on the card sorting machine in such a manner as to give the total men and women majors by department. The number of freshmen men and women majoring in each department is also counted.

Church Affiliation Statistics

At the present time, the church affiliation statistics are taken directly from the church census cards which are included in the registration packets. The returned cards are sorted by denomination, and then by membership or church preference for that denomination. This sorting is a hand sort, after which the cards are sorted by men and women and counted on the card sorting machine.

Registration by Number of Semester Hours

This tabulation, although included under the general heading of post-registration statistics, is actually prepared some time after the middle of the semester under ordinary circumstances. After mid-semester, the schedules of the students are quite definite, with little possibility of any change other than a withdrawal, so at this time the study

list card is checked for the number of semester hours the student is carrying. This amount is punched into the master enrollment card for the current semester, and the tabulation of the number of semester hours scheduled may be made. The tabulation is made to provide the number of men, both graduate and undergraduate, and the number of women, both graduate and undergraduate, who are taking each possible number of semester hours. Consolidated totals are prepared for men, women, undergraduate, and graduate students.

The statistical tabulations mentioned above have enabled the Tabulating Department to answer nearly every statistical questionnaire with a minimum of additional effort.

Probation Reports

Mid-semester is the only time other than final grade report time that a grade report is made to the individual student, and his parents in case he is a minor. At North Texas State College, the instructors turn in a report of each student who is failing a course as of mid-semester, with his analysis of the major cause of the failure. The probation report cards are sent to the Tabulating Department from the Office of the Vice-President, and the class card for each failing grade reported is pulled from the file. The reason code number checked by the instructor is punched into an unused column of the class card, the class cards are sorted into permanent student number sequence and placed in the collator where the address cards for the students with

failing grades are merged into the class cards. The probation report forms are then prepared on the accounting machine, with the classes for which each student is reported failing shown, together with the reason code indicated by the instructor. The addresses are listed in a position that makes possible the use of a standard window-type envelope.

CHAPTER VI

END OF SEMESTER PROCEDURES

Teacher Grade Reports

Teacher grade reports are prepared in time for the instructors to have the blank report forms in their possession for about one week prior to the time when final examinations begin. This will give the instructors time to give a final check to the accuracy of the class rosters, and resolve any differences before the week of final examinations. Once the final examinations begin, the final grade reports are due in the Registrar's Office within twenty-four hours after the examination.

As the class cards are taken from the file to prepare the teacher grade report, they are placed in the collator to sequence check the course number, section number and student alphabetic sequence number. They are then listed on the teacher grade report, with the file tab header card acting as a master card to head the page, then skipping the sheet to the first line of the main body where the student's name, permanent student number, classification, and number of semester hours scheduled for the course are listed. A "CR" indication is also listed in the remarks column for any student who is taking the course for graduate credit.

As the teacher grade reports are completed, the header cards are pulled from the class cards, and the class cards with the accompanying teacher grade reports are delivered to the appropriate department head for further distribution to the individual instructors.

As the final examinations are completed and the instructors assign the final grades, it is necessary only to assign the proper letter grade on the teacher grade report, place the same letter grade on the corresponding class card, and sign the class card. In practice, most instructors use a small rubber stamp to sign the class cards, as the signature is used primarily for identification purposes, and only in a secondary way for authentication of the grade. The dates on the class cards in case of students who have dropped courses, withdrawn from school, or the date graduate credit was approved for an undergraduate student, are of assistance in assigning the proper grade, and in making any necessary or pertinent remarks as may be called for by the circumstances.

Student Grade Reports

The teacher grade reports and the accompanying class cards are received from the instructors by the Registrar's Office where the class cards are checked against the teacher grade report for accuracy. The class cards are then forwarded to the Tabulating Department, where the grades are manually sorted, and checked. One person will take an incoming group of completed class cards and sort them into

stacks of letter grades. Another person will then quickly verify the sort separation. The cards for a single letter grade are sorted on the number of semester hours for which the course was taken, and the letter grade and the proper number of grade points for the particular letter grade and number of semester hours are gang-punched into the class card. As groups of class cards are processed through the reproducing punch, the class cards are block sorted into groups of one thousand permanent student numbers, where they are held until all grades are in and all class cards have had the grades and grade points processed into them.

At this point, one of the permanent student number blocks is sorted to permanent student number. The file of address cards for those students in school have previously had interfiled a card for each student giving the beginning and ending date of the semester. The final grade cards are placed in the secondary feed of the collator, the address and date cards in the primary feed, and the two decks are merged together, pulling any cards which do not match permanent student numbers. Most cards will fall into a merged group of address, date, and final grade cards. Exceptions will be grade cards which have no address or date cards, or address and date cards for which there are no final grades. These groups must have special attention because they represent possible errors, which are usually easy to clear up, but which may effect other grade reports, as most exceptions

result from a permanent student number being punched incorrectly.

The student grade reports are then prepared on the accounting machine, which accumulates the number of semester hours passed and the total grade points earned. These data are very useful to pull out quickly the students who are entitled to be on the honor roll, and at the same time, are also useful to separate students who have failed to maintain the required minimum of one grade point for each semester hour of credit.

Permanent Record Posting

The only process which needs to be done before posting the permanent records from the cards which were used to prepare the student grade report is to pull the name and address cards from the file. This can be done quickly on the sorter, since the name and address cards have a significant "X" punch. The semester date cards do not have this "X" punch, and so they will remain in the grade card file, where they can be used to date the permanent record entry.

In practice, it is usually after the beginning of the following semester before time will permit the posting of the permanent records, but there is one operation that needs to be done in the interim, that can usually be done in the short time between semesters. The number of semester hours passed and the number of grade points earned need to be punched into the old master enrollment card. This could

conceivably be done at the same time the student grade reports are prepared, but since the master enrollment cards need to be matched against the grade cards, it is not usually done at the same time. One alternative method, utilizing a few blank columns in some otherwise waste cards would allow the summarizing of hours and grade points earned at the same time the student grade reports are prepared, if it is felt the resulting deceleration of the grade report preparation will not provide a serious handicap. The best answer for one semester, even in the same school, will not always provide a satisfactory completion time within deadline limits for another semester. Therefore this procedure may be done in various ways for different semesters, depending upon the time when the student grade reports must be ready for the students. At North Texas State College, there is usually not such a pressing need at the end of the spring semester and the second term of summer school but that the summary punching operation could be completed during the student grade report preparation. There is, however, a definite rush at the end of the fall semester, and especially so at the end of the first term of summer school.

The permanent records are posted as a single sheet feeding operation, with the same type of total accumulation as was used in preparing the student grade report, but the accounting machine is controlled to stop feeding class cards and eject the permanent record at the change of permanent

student numbers. Where there is an average of about seven cards to be posted to a permanent record, speeds of posting permanent records have ranged as high as 250 per hour, but an average speed of 200 records per hour may be maintained by a proficient operator. In order to do this, however, it is necessary for the accounting machine operator to have the permanent records pulled from the file and checked against the sequence of the grade cards before the records and the accompanying grade cards are delivered to him. At North Texas State College, the permanent records are pulled from the file by hand to match a group of about 100 master enrollment cards. The master enrollment cards and permanent record cards are handled very carefully to maintain the same sequence. The master enrollment cards are then placed in the collator to pull the proper grade cards. In this manner, if any permanent record is missing from the file, the master enrollment card and the final grade cards will not be matched, so they may be set aside until the permanent record is found.

CHAPTER VII

SUMMARY, CLOSING OBSERVATIONS, AND RECOMMENDATIONS

Summary

This study set out in Chapter I to present a history of the development of the punched card registration system in use at North Texas State College, to describe the various job operations involved, and to develop a step by step procedure manual to be followed in the routine operation of that system.

In Chapter II the problems involved in the development of the punched card registration system at North Texas State College are presented through a discussion of the layout and design of the necessary forms. A sample of each of the forms used in the registration packet, the grade report, and the probation report, and the permanent record illustrate the materials developed to implement the punched card registration system at North Texas State College. A brief explanation of the use of each form is included in this chapter.

Chapter III begins the discussion of the second phase of the problem as outlined in Chapter I. The discussion covers all the job procedures that must be completed prior to the time of registration. These are largely the coding and the punching of the master enrollment card and the subsequent preparation of the registration packet.

Chapter IV describes the entire registration process, from the point of view of the student as well as the employees of the Tabulating Department. This chapter also treats the handling of course adds, drops, late registrations and class transfers.

In Chapter V, the post-registration procedures are discussed. This chapter covers the period after the twelfth class day of a long session semester, and is confined to a development of the statistical data which are used in reports to various organizations, such as the Texas Education Agency and the Southern Association of Colleges and Universities.

Chapter VI concludes the second phase of the study with a description of the job procedures involved at the end of the semester. This includes preparation of forms for the instructors to report student grades to the Registrar's Office, to report grades for the individual student, and the posting of final grades to the permanent record. All of the above reports are prepared on the International Business Machines Corporation accounting machine.

Chapter VII summarizes and concludes the study.

The step by step procedure manual, which was developed as part three of the problem, is included in the appendix.

The material developed by this study is not to be construed as a final answer to the problem of mechanizing the process of registration. In the light of increased experience, changing needs and requirements, as well as the

introduction of new mechanical devices with their resultant modification of procedures, new methods and materials will always need to be tested and instituted.

Closing Observations

The conversion to a punched card method of registration accounting should in itself be of assistance in seeking ways to improve the registration system. At North Texas State College, there is no utilization made of what is known as a pre-registration system. If the decision should be made to convert to a pre-registration system, or experiment with the use of such a system for a semester, there would be no major obstacle imposed by the use of the mechanized system. In fact, about the only change would be in the time of preparation of the class cards, and probably the place where they would be delivered. Pre-registration does carry with it some dangers which would have to be carefully weighed before deciding in favor of such a system. The longer period during which students would have to have possession of the registration packet and class cards would probably mean more card damage and a higher percentage of rejected and destroyed cards. If such were true, there not only would not be any advantage to pre-registration, but there would be more difficulties caused than the change could possibly offset.

The major economy to be realized from the installation of punched card registration accounting may be expressed in

two ways. First, under a manual accounting system, the increase in personnel and equipment to handle an increase in work volume is inclined to be in a geometric rather than arithmetic progression. As a result, the physical facilities of the school may not be adequate to house the activities required. In short, the manual system, both by size and speed of progress can approach the point where it is simply physically impossible to accomplish the volume of work required in the time and space which can be allocated.

Secondly, the accounting machines have both capacity and time availability that is seldom utilized to the maximum, so that increase in work volume can frequently be absorbed into the existing work schedule with only minor adjustments. The addition of work volume beyond the point mentioned above, may necessitate the addition of a temporary overtime or second shift, or even the addition of personnel or equipment, but the addition of these is very seldom in proportion to the increased work capacity that is thereby created.

At North Texas State College, for the fall semester of the 1956 school year, there were 5513 students enrolled. The International Business Machines installed in the Tabulating Department consisted of one type 402 accounting machine, two type 024 key punch machines, one type 552 interpreter, one type 077 collator, one type 082 card sorting machine, and one type 514 reproducing summary punch. With the exception of the posting of permanent records, no modification

of the present work schedule is anticipated for an increase of students to between 7,000 and 8,000 in the next few years. No insurmountable obstacles are foreseen if the enrollment should increase to 10,000 students with approximately the same amount of mechanical equipment.

Operational experience has been the basis upon which modifications and new procedures have been introduced into the punched card registration method at North Texas State College. The addition of the fee card as a method of fee analysis, and as a means of ready cross reference to the student body alphabetically as well as by permanent student number, was one way of meeting a felt need. That need has been met, but in a temporary method of solution, since study is presently being conducted to determine the possibility of a revision of the method of fee collection and receipt writing that will simplify both of these operations and provide the information furnished by the present fee card in a simultaneous operation. Constant study and experimentation is the only way in which the best utilization of mechanical capacity and human resources may be realized in the face of ever changing requirements.

Recommendations

It is recommended that North Texas State College and other educational institutions continue to develop new and improved procedures for mechanized registration accounting.

It is further recommended that educational institutions using International Business Machines Corporation punched card accounting machines for registration accounting establish some sort of clearing house for the exchange of new and improved operating methods and procedures.

For North Texas State College, it is recommended that the present method of fee taking and receipt writing be reviewed with the intention of utilizing a punched card method to increase the speed and efficiency of registration.

APPENDIX

A MANUAL OF PROCEDURES FOR PUNCH CARD REGISTRATION AT NORTH TEXAS STATE COLLEGE

Procedures Prior to Registration

1. Preparation of master enrollment cards for new students
 - 1.1 Secure completed application for admission or application for transfer forms from Registrar's Office. (For this purpose a graduate student, even though continuing in college from an undergraduate status is classified as a new student).
 - 1.2 Assign codes for sex, classification, major, residence, veteran, and free student status. Also alphabetic sequence and permanent student numbers.
 - 1.3 Key punch as follows:

<u>Columns</u>	<u>Description</u>
1- 5	Alphabetic Sequence Number
6-11	Permanent Student Number
12	Original Entry Code
13	Sex and Marital Status
14	Classification
15-34	Student Name
35-37	Entry Date
38-39	Major
40-42	Birth Date: Month and Year
43-50	Residence: State; County; City
51	Veteran Status
52	Free Tuition Status

2. Preparation of master enrollment cards for continuing students
 - 2.1 Sort number semester hours credit as of beginning of semester (columns 64-66).
 - 2.2 Sort number semester hours scheduled current semester (columns 58-59).

- 2.3 Pull all cards where hours of credit as of beginning of semester plus hours scheduled will not total the minimum for the next classification: 30 hours for sophomores; 60 hours for juniors; 90 hours for seniors.
 - 2.4 Remaining cards should be those students whose classification will change for the next semester.
 - 2.5 Reproduce cards from step 2.3, leaving out columns 12, and 64 through 79. See step 2.7.
 - 2.6 Reproduce cards from step 2.4, leaving out columns 12, and 64 through 79. Gang-punch new classification as appropriate in column 14. See step 2.7.
 - 2.7 Note: If a new alphabetic sequence number series is to be assigned, do not reproduce columns 1 through 5 in steps 2.5 and 2.6.
 - 2.8 Punch North Texas degree code in columns 61 through 63 for students whose classification was raised to 5 or 6 in step 2.6.
3. Preparation of class cards
 - 3.1 Gang-punch "G" for graduate credit in column 79 of all solid red class cards to be used.
 - 3.2 Check advance copy of class schedule for course and section numbers to be used for next semester.
 - 3.3 Determine number of class cards needed. Use previous corresponding term twelfth class day report, plus safety margin, minus cards on hand.
 - 3.4 Place proper section header followed by blank class cards in card tray awaiting gang-punching.
 - 3.5 Repeat steps 3.2 through 3.4 for each course listed on the class schedule. Graduate class cards may be used only in courses numbered 300 or higher.
 - 3.6 Intersperse master card gang-punch all items of section master card information, columns 35-75. Gang-punch control "X" in column 64 and "4" in column 80. Reproducer controlled on master card "X" in column 66.
 - 3.7 Verify punching by running all cards through read side of reproducer, wired to comparing positions.

- 3.8 Interpret all cards on lower line, using lower line class card interpreter panel.
 - 3.9 Place new class cards behind proper index card in class card reserve file. Section master cards should be pulled and returned to their file.
4. Preparation of registration packets
- 4.1 Punch separation code number in column 80 of a supply of blank registration packet cards.
 - 4.2 Place code "1" cards in secondary feed of collator and code "3" cards in primary feed. Merge, using force feed on both feeds.
 - 4.3 Place cards from step 4.2 in primary feed of collator and code "5" cards in secondary feed. Merge, using low secondary primary reading to force a secondary feed. Force primary feed every cycle.
 - 4.4 Repeat step 4.2 with code "2" cards in secondary feed and code "4" cards in primary feed.
 - 4.5 Repeat step 4.3 with code "2" and "4" cards in primary feed and code "6" cards in secondary feed.
 - 4.6 Place cards from step 4.3 in secondary feed of collator and cards from step 4.5 in primary feed. Merge, using force feed on both feeds. Card sequence should read 1-2-3-4-5-6, and repeat. This is the basic packet.
 - 4.7 Place some packet groups from step 4.6 in the primary feed of the collator and graduate information cards, code "7", in the secondary feed. Merge, using low second primary reading to force secondary feed. Secondary feed to force primary fee. This is the continuing graduate student packet.
 - 4.8 Place some packet groups from step 4.6 in the primary feed of the collator and new student cards, code "8", in the secondary feed. Merge, as in step 4.7. This is the new undergraduate packet.
 - 4.9 Place some packet groups from step 4.7 in the primary feed of the collator and new student cards, code "8", in the secondary feed. Merge, as in step 4.7. This is the new graduate student packet.

- 4.10 Place packet groups from step 4.6 in the primary feed of the collator and master enrollment cards for continuing undergraduate students in the secondary feed. Merge, as in step 4.7.
- 4.11 Place packet groups from step 4.7 in the primary feed of the collator and master enrollment cards for continuing graduate students in the secondary feed. Merge, as in step 4.7.
- 4.12 Place packet groups from step 4.8 in the primary feed of the collator and master enrollment cards for new undergraduate students in the secondary feed. Merge, as in step 4.7.
- 4.13 Place packet groups from step 4.9 in the primary feed of the collator and master enrollment cards for new graduate students in the secondary feed. Merge, as in step 4.7.
- 4.14 Place cards from steps 4.10, 4.11, 4.12, and 4.13 in the reproducer and intersperse master card gang-punch all information in columns 1 through 52. Control the reproducer on master card "X" in column 64. Keep each group separate.
- 4.15 Place cards from step 4.14 in the interpreter and interpret, using the upper line registration packet panel.
- 4.16 Packet groups which were originally prepared in steps 4.10 and 4.11 may be merged on alphabetic sequence number to provide one group of continuing student packets.
- 4.17 Packet groups which were originally prepared in steps 4.12 and 4.13 may be merged on alphabetic sequence number to provide one group of new student packets.
- 4.18 File the cards from step 4.16 in registration packet envelopes, pulling the master enrollment cards at the time.
- 4.19 File the cards from step 4.17 in registration packet envelopes, pulling the master enrollment cards at the time. These packets are for new students who must present an acceptance notice or temporary permit to register before the packet can be issued.

- 4.20 Sort master enrollment cards from steps 4.18 and 4.19 on permanent student number.
- 4.21 Merge cards from step 4.20 into "Not In School" master enrollment card file. This is now a file of every permanent student number.

Registration Procedures

1. Registration packet processing
- 1.1 Packets received from the registration line are emptied, dean's card with green stripe in front. Scan all cards to be sure they are right side up. Stack in packet groups.
- 1.2 Sort groups from step 1.1 on column 80. The following groups will result:

<u>Sorter Pocket</u>	<u>Description</u>
2	Student Personnel Cards
3	Dean's Cards for Vice-President
4	Dean's Cards and Class Cards
5	Church Census Cards
6	News Service Cards
7	Graduate Information Cards
8	New Student Cards

- 1.3 Place cards from sorter pocket 4 in step 1.2 in punch feed of reproducer. Intersperse master card gang-punch columns 1 through 34. Control on "X" in column 64. Master "X" control set on "Detail".
- 1.4 Separate cards from step 1.3 on column 64. Dean's cards should reject. If any dean's cards fall in the 11 pocket, the class cards immediately following must be corrected, as they are double punched.
- 1.5 Sort class cards from step 1.4 on column 35. This will block class cards as to school or college. If time permits, cards with 1's may be sorted on columns 36 and 37; cards with 3's may be sorted on column 36. All cards will then be in departmental groups.
- 1.6 Repeat steps 1.1 through 1.5 until all packets for regular registration hours have been processed.

- 1.7 Sort cards in departmental groups from step 1.5 on columns 5 through 1, and 45 through 40, with column 43 sorted alphabetically. Cards will be alphabetically filed by department, course and section.
- 1.8 Place cards from step 1.7 in the primary feed of the collator, and section header tab cards in the secondary feed. Merge, sequence check, and pull unequals. If any class cards are selected, make a temporary header card by duplicating columns 35 through 62 with an "R" in column 69. Unmatched headers may be returned to the file.
- 1.9 List cards from step 1.8 on one part 1081 paper, using the class list board. Take a final total on a separate page at the end of each department. This is the temporary class list.

Do the following as time permits:

- 1.10 Separate the cards from sorter pocket 2 in step 1.2 on column 13. Cards falling in pockets 1 and 2 are for men, cards falling in pockets 3 and 4 are for women.
- 1.11 Sort the groups of cards from step 1.10 on alphabetic sequence number and deliver the cards to the Dean of Men, or Dean of Women, as appropriate.
- 1.12 Sort the cards from sorter pocket 3 in step 1.2 on alphabetic sequence number and deliver the cards to the Office of the Vice-President.
- 1.13 Sort the cards from sorter pocket 6 in step 1.2 on alphabetic sequence number and deliver the cards to the Student News Service.
- 1.14 Sort the cards from sorter pocket 7 in step 1.2 on alphabetic sequence number and deliver the cards to the Graduate Office.
- 1.15 Sort the cards from sorter pocket 8 in step 1.2 on alphabetic sequence number and deliver the cards to the Recorder's Office.
- 1.16 Sort the cards from sorter pocket 5 in step 1.2 into religious denomination indicated. Sort the denominations into membership and preference. Count the number of men and women in each group and record. The cards may then be delivered to the Student Religious Council. The above count is the basis for religious preference statistics.

2. Fee card preparation
 - 2.1 Study list cards will be brought to the Tabulating Department by the Business Office in fee amount and type groups.
 - 2.2 Reproduce study list cards by fee amount groups for columns 1 through 55 and 80. Gang-punch amount of fees and date paid in columns 69 to 73 and 74 to 79. Special groups, such as veterans, rehabs, etc., gang-punch group type in columns 56 to 68.
 - 2.3 Sort study list cards from step 2.2 on alphabetic sequence number and deliver cards to the Registrar's Office.
 - 2.4 Sort fee cards from step 2.2 on alphabetic sequence number. Interpret on upper line from fee card panel. File as current semester fee cards.
3. Late registration
 - 3.1 Late registrants' packets will be received from the Business Office with the study list cards separated into fee amount, date, and type groups.
 - 3.2 Prepare fee cards as above. File in fee card file. Study list cards are delivered to Registrar's Office.
 - 3.3 Class cards are processed as previously noted except that the date of the late registration is stamped in the proper section on the individual class card.
 - 3.4 A temporary class admission notice is prepared for each class card and forwarded to the instructor.
4. Course adds
 - 4.1 Class cards are pulled for each course add notice received. Fee cards are pulled from the file for each person adding a course or courses.
 - 4.2 Duplicate columns 1 through 34 from the fee card to the class card or cards for each student.
 - 4.3 Return fee cards to the fee card file.
 - 4.4 Interpret upper line of class cards.
 - 4.5 Date class cards in "ADD" section.

- 4.6 File completed class cards.
- 4.7 Stamp transaction date on add cards, and place in instructor's departmental exchange box.
5. Course drops
 - 5.1 Drop cards are sorted to approximate class card sequence by hand.
 - 5.2 Class cards are removed from file, date of "Drop" noted, and refiled.
 - 5.3 Drop cards are stamped with transaction date and placed in instructor's departmental exchange box.
6. Class transfers
 - 6.1 Class transfer slips are hand sorted to class card sequence.
 - 6.2 Class cards for courses to be transferred from are pulled from the file.
 - 6.3 Class cards for courses to be transferred to are pulled from the reserve file and placed behind the class card for the course being transferred from.
 - 6.4 Duplicate columns 1 through 34 from old class cards to the new class cards.
 - 6.5 Separate old and new class cards. Old class cards are filed in a temporary holding file if transfer statistics are desired, otherwise they may be destroyed.
 - 6.6 Interpret new class cards on upper line.
 - 6.7 Date new class cards with date of "Transfer - In".
 - 6.8 File new class cards in proper sequence in class card file.
 - 6.9 File transfer slips by student name.

Post-Registration Procedures

1. Statistical reports

- 1.1 At the end of the twelfth class day, sort all fee cards into permanent student number sequence.
- 1.2 Place fee cards from step 1.1 in secondary feed of collator, and file of all permanent student number master enrollment cards from step 4.21 of procedures prior to registration in the primary feed. Match, do not merge, and pull unequals. Three files should result. Fee cards, matched master cards and unmatched master cards.
- 1.3 Unmatched master cards from step 1.2 are returned to the file which is now the "Not In School" master enrollment card file.
- 1.4 Fee cards are returned to the fee card file.
- 1.5 The matched, or "In School" master cards may now be analyzed for statistical reports.
- 1.6 Pull all cards not punched "42" in columns 43 and 44. These are out of state students.
- 1.7 List out of state student cards by state numeric code.
- 1.8 Cards punched "42" in columns 43 and 44 from step 1.6 are sorted on columns 45 through 47.
- 1.9 Cards from step 1.8 are tabulated for card count by county code in columns 45 through 47. With the figures from step 1.7, this is the basis of the residence statistical reports.
- 1.10 All master cards are sorted on classification in column 14.
- 1.11 Each classification from step 1.10 is sorted into men and women groups on column 13. Count each group.
- 1.12 Each men and women classification group from step 1.11 is sorted on original entry in column 12. Count each group. These figures are the basis of the total enrollment statistical reports.
- 1.13 The master enrollment cards may be sorted into permanent student number sequence and filed in the "In School" master enrollment card file.

- 1.14 The dean's cards from step 1.4 in the registration procedures are sorted into major order on columns 38 and 39.
 - 1.15 Each major group is scanned for listings of majors, to pull out students who have changed their major.
 - 1.16 Each major group is sorted by column 13 to men and women, with each group counted. This is the basis for the enrollment by major statistics.
2. Address card preparation
- 2.1 Place the master enrollment card file in the secondary feed of the collator, with the file of student name and address cards from the previous semester in the primary feed. Match, pulling unequals.
 - 2.2 Sort the matched master enrollment cards from step 2.1 on date of birth and pull out the group who were neither twenty-one years of age nor married as of the start of the current semester.
 - 2.3 Match the group of master enrollment cards pulled in step 2.2 against the matched address cards from step 2.1.
 - 2.4 Pull the first or name card from each student number group from the matched name and address cards from step 2.3. The address cards may be disposed of.
 - 2.5 The addresses in the unmatched name and address cards from step 2.3 must now be checked against a current semester dean's or study list card to insure the home address in the cards is correct.
 - 2.6 Sort the unmatched master enrollment cards from step 2.1 on date of birth and sex. Pull out the group who were neither twenty-one years of age nor married as of the start of the current semester.
 - 2.7 Punch student name and parent's home address cards for all master enrollment cards from step 2.6 for students who were neither twenty-one years of age nor married as of the start of the current semester.
 - 2.8 Punch student name cards but not address cards for all master enrollment cards from step 2.6 for students who were twenty-one years of age or married as of the start of the current semester.

- 2.9 Merge all master enrollment cards on permanent student number and return to "In School" master enrollment card file.
- 2.10 Merge all "In School" student name and address cards on permanent student number and file.

Note: All student name and address cards are to have permanent student number in columns 6 through 11, name, first name first (John Joe Johnson), and address in columns 15 through 34, with a control "R" in column 80.

3. Probation report preparation

- 3.1 An individual three by five inch card will be received from the Office of the Vice-President for each course a student is failing as of mid-semester, showing the reason for the failure.
- 3.2 Sort all failing notice cards by reason code.
- 3.3 Pull the class card for each failing notice by reason code group.
- 3.4 Gang-punch the reason code into column 63 of the class card.
- 3.5 Sort the class cards from step 3.4 into permanent student number sequence.
- 3.6 Match-merge the class cards from step 3.5 against the "In School" name and address file. Class cards in the primary feed, name and address cards in the secondary feed.
- 3.7 List the merged cards on the probation report form.
- 3.8 Sort separate the cards from step 3.7 on column 80.
- 3.9 Merge the address cards into the address card file.
- 3.10 Deliver the completed probation reports and the failing report cards to the Office of the Vice-President.

4. Registration by number of semester hours

- 4.1 After mid-semester, sort the master enrollment cards for the "In School" students into alphabetic sequence.

- 4.2 Place the study list cards from the Registrar's Office in the primary feed of the collator and the master enrollment cards from step 4.1 in the secondary feed. Match, pulling unequal cards, on permanent student number. Unequals will usually mean an error of punching alphabetic sequence number.
- 4.3 The master enrollment cards are placed in a key punch set to punch columns 58 and 59 and skip out. The number of hours for each student is read from the study list card and manually punched into the master enrollment card.
- 4.4 The study list cards may be returned to the Registrar's Office as soon as a group is finished.
- 4.5 Sort the master enrollment cards into semester hours scheduled sequence.
- 4.6 Sort each semester hour scheduled group on sex; count and record.
- 4.7 Sort each semester hour scheduled group on classification; count and record.

End of Semester Procedures

1. Teacher grade reports
 - 1.1 Place class cards in the primary feed of the collator by departmental groups and sequence check alphabetic sequence number, section number, course number, and department code.
 - 1.2 List the entire class card file, using the teacher grade report form.
 - 1.3 Pull the tab header cards from the class cards by sorting column 69.
 - 1.4 Merge the tab header cards into the header card file so it will be complete and in sequence at the start of the next semester.
 - 1.5 Gang-punch the semester and year in columns 76 to 78 in all class cards.
 - 1.6 Deliver the teacher grade reports and the accompanying class cards to the various departments for distribution to the individual instructors.

2. Date card preparation

- 2.1 At some convenient time, when the master enrollment cards are in permanent student number sequence, reproduce columns 1 through 34 into a blank deck of cards. At the same time, gang-punch the first and last date for the current semester into columns 38 through 62, with column 46 as the first column of any alphabetical material.
- 2.2 Shortly before the end of the semester, place the date cards in the secondary feed of the collator, the name and address cards for the current semester students in the primary feed and merge, pulling unequals.
- 2.3 Store the cards from step 2.2 pending the preparation of the student grade reports.

3. Student grade reports

- 3.1 Class cards with the final grade assigned by the instructors will be received from the Registrar's Office after they have been checked against the teacher grade report for accuracy.
- 3.2 Hand sort the grade cards into letter grade groups.
- 3.3 Verify the hand sort. Do not verify your own sorting!
- 3.4 Sort the letter grade groups on column 65 for number of semester hours credit.
- 3.5 Gang-punch letter grade and number of grade points according to number of semester hours credit.
- 3.6 Block sort grade cards into groups of 1,000 permanent student numbers.
- 3.7 Repeat steps 3.1 through 3.6 until notified that all grade cards have been received.
- 3.8 Sort grade cards in block sort groups from step 3.6 into permanent student number sequence.
- 3.9 Place cards from step 3.8 in secondary feed of the collator, date, name, and address cards from step 2.3 above in the primary feed and match-merge.

- 3.10 List the cards from step 3.9 on the student grade report form.
 - 3.11 Deliver the completed student grade reports to the Registrar's Office.
4. Summary punching hours passed and grade points earned
- 4.1 Sort the cards from step 3.10 above on column 80, sort suppress "4's". The address cards will sort in pocket 9, and the date and grade cards will reject.
 - 4.2 Match the date and grade cards from step 4.1 against the master enrollment cards for the current semester.
 - 4.3 Tab the date and address cards by permanent student number and summary punch the semester hours passed in columns 67 and 68, and the grade points accumulated in columns 75 and 76.
 - 4.4 Match the master enrollment cards from step 4.3 as they come from the summary punch against the file of all permanent student number master enrollment cards.
 - 4.5 Tab the master enrollment cards for the current semester from step 4.4, adding the number of semester hours as of the beginning of the semester in one counter and the number of hours passed in another. Do the same for grade points. On a minor total, add the number of semester hours passed into the counter for the semester hours at the beginning of the next semester. Do the same for grade points. Summary punch the totals as the new beginning of semester amounts in the matched master enrollment cards from step 4.4.
 - 4.6 Return master enrollment cards from the accounting machine in step 4.5 to the "In School" master enrollment card file.
 - 4.7 Merge the master enrollment cards from the reproducer in step 4.5 with the unmatched master enrollment cards from step 4.4. This completes the all permanent student number file of master cards.
5. Permanent record posting

- 5.1 Take master enrollment cards for the current semester in groups of about 100, and pull permanent records in permanent student number order.
- 5.2 Check to insure sequence of master enrollment cards is the same as permanent records, with no missing cards.
- 5.3 Match the master enrollment cards from step 5.2 against the date and grade cards from step 4.3 above.
- 5.4 Post the matched date and grade cards from step 5.3 on the permanent records from step 5.2. Each change in permanent student number will eject the permanent record and stop the accounting machine.

BIBLIOGRAPHY

Books

Baehne, G. W., (Editor), Practical Applications of the Punched Card Method in Colleges and Universities, New York, Columbia University Press, 1935.

Articles

Fichtenbaum, Max, "Use of Hollerith Tabulating Machines in Preparing Registration Records," Bulletin of the American Association of Collegiate Registrars, II(April, 1936), 171-186.

Hoffman, William S., "Tabulating Machines and University Statistics," Journal of the American Association of Collegiate Registrars, XV(October, 1939), 66-70.

Long, J. Everett, "Machines in Admissions and Records," College and University, XXV(July, 1950), 593-597.

Templeton, Frank L., "The Use of IBM Techniques in Program Making and Class Scheduling," Bulletin of the National Association of Secondary-School Principals, XXXIV(October, 1950), 15-22.

Watkins, John G., "Machine Methods of Handling Large Classes," Journal of Experimental Education, XI(March, 1943), 243-244.

Unpublished Materials

Master Code used by the Tabulating Department, North Texas State College, Denton, Texas.

Newspapers

Denton Record Chronicle, November 9, 1955.