Series: Installation Management

Topic: How I Run My Shop

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Author's Note: This talk will include a slide presentation as well as several handouts not included in the appendix. In addition, four of the systems which will be discussed are available via the San Jose tape swap. These will be in the next release of the Contributed Library as well.

Introduction:

The Multnomah County Education Service District is a regional education center providing services to the twelve school districts in Multnomah County. In essence, it is a service bureau for local school districts. The Data Processing Department offers a variety of administrative applications for business and student-related services. Business-oriented applications include payroll, personnel, budgeting, accounts payable, accounts receivable, fixed-asset inventory accounting, word processing, and order-entry processing for supplies obtainable through a multi-county cooperative purchasing program. Student-oriented administrative applications include film booking and distribution, student grade reporting, attendance reporting, competency reporting, handicapped child census, student scheduling, achievement test scoring and analysis, and course goals retrieval. There are 87,000 school children in Multnomah County, 52,000 of whom are in the Portland district with the remaining 35,000 spread across the other eleven districts.

Our current staff includes 23 employees, with an additional one to two positions slated for 1980-81. The department is comprised of three sections: User Services, Systems and Programming, and Computer Operations. (Reference Appendix A.) Each of these three sections is discussed in detail below.

User Services

The User Services section is the liason between the data processing customer and the computer. User Services is responsible for user documentation, customer training, job scheduling, and job stream set-up for programs not run directly by customers. We also publish a bi-monthly customer newsletter which is primarily written by the User Services staff.

Nearly all of our applications are interactive. Our customers are responsible for entering, editing, and updating their own data. In addition, our customers have the capability of running many reports on their terminals. Most of our card-oriented systems have been upgraded to have online capability. We are in the process of phasing out punched cards completely.

We basically deal with two types of applications - business applications and student applications. (We are not responsible for instructional or academic data processing, although we do manage the hardware for this function.) We further classify our services as direct and indirect. The direct services involve applications where the end user in the school building or district office is our contact; about 70 percent of our services are direct. The 30 percent which are indirect are services which generally are provided to other departments in our organization. One example would be our film booking and distribution system, where our customer is the Educational Resource Center and the end user (their customer) is the classroom teacher.

A menu of the services currently offered is provided in Appendix B.

All requests for modifications or enhancements to existing systems are processed through User Services. Our customers do not deal directly with the Systems and Programming section nor with the Computer Operations section. Requests for new systems are initiated with the department director and reviewed with the appropriate supervisor for User Services as well as the supervisor of the Systems and Programming section. The Request for Programming Services form (Appendix C), or RFPS as it is known in DP, provides documentation for work assigned to the Systems and Programming staff. Anyone in the department may initiate an RFPS and have it approved by his or her respective supervisor. Most requests, however, do come from customers directly to their official data processing contact, the data control technician. Bugs needing fixes are put into the work queue immediately. However, requests for enhancements or non-mandatory modifications must first be reviewed and approved by the appropriate Advisory Committee.

The Advisory Committee for Student Applications is composed of one district office representative plus one representative per building for each district served. This Advisory Committee meets quarterly to review and prioritize requests for programming services. About 500 hours per quarter of in-house programming time are dedicated to those requests. An excess of 100 requests are processed each quarter for this group of customers alone.

The Advisory Committee for Business Applications meets semi-annually. this group is made up of the business office managers and/or deputy clerks for each of the districts. Our two major financial packages are proprietary. Because we are prohibited from making modifications to the vendor's code, programming requests can rarely be handled with our in-house staff and must be budgeted for one year in advance.

Systems and Programming

All work formally assigned to the programmer analysts is done so via the Request for Programming Services form. Informal discussions, general support of User Services, and requests which do not affect existing documentation do not require an RFPS. For those requests awaiting approval of the Advisory Committee, time estimates are provided immediately by the supervisor of Systems and Programming. The RFPS's are then collected by the appropriate supervisor of User Services for review at the next Advisory Committee meeting. After approval by the Advisory Committee, the RFPS is assigned to the responsible programmer analyst. Upon completion of the modification, the programmer analyst signs off on the request. The four-ply RFPS form allows for copies to go to the initiator's supervisor at the onset, and upon completion of the assignment, to the responsible programmer analyst, the supervisor of systems and programming, and the initiator's supervisor.

If the RFPS resulted in a change to the system or jobstream documentation, the corrected documentation is attached with the completed RFPS and returned. All documentation is on-line. User manuals are entered via word processing by the department's secretarial staff. Jobstream and system documentation are maintained by the Systems and Programming section. All documentation is kept in the Technical Library along with a complete set of system manuals, trade publications, books, and other educational materials for use by the data processing staff.

We are a COBOL shop. (We were a BETA test site in 1975 for COBOL B and a BETA test site in 1979 for COBOL II.) About 90 percent of our code is COBOL, 5 percent SPL, and the remainder a smattering of BASIC, FORTRAN, and RPG.

We currently use the following programming software: VIEW, IMAGE/QUERY, and KSAM from Hewlett-Packard; EDITOR/SCRIBE from the Los Altos Research Center; QEDIT and SUPRSORT from Robelle Consulting LTD.; ADAGER from REGO Software PTY; and SKIPPER and RSPOOL from DataCon of St. Helens.

Computer Operations

The Computer Center with its hardware is the heart of the department. It operates 24 hours a day, 5 days a week and occasionally weekend shifts as well. Our current equipment includes the following: one HP3000 Series III with 1M byte memory and 480M byte disc storage; one HP3000 Series II with 512K bytes memory and 375M bytes disc storage; two HP2000 Access systems (for instructional use only); one IBM System/7 bisynchonously connected

to the Series III via a modem eliminator (RJE/2780-3780 protocol); one NCS 7005 Optical Mark Reader; a burster and a decollator. We were a BETA test site for the Koala (HP3000/30) and plan to add a third system in 1980.

We have three printers for the two HP3000's. One (HP2617) 600 lpm printer is dedicated to each system; during day-shift, these two printers are mounted with stock paper (8 1/2 X 14, one-ply). The third printer, shared between the two systems, is a 1200-1800 lpm (HP2618) printer. All special forms are deferred to this logical device since they require operator intervention. We have about 75 custom forms at present.

While we do allow programmers to stream compiles (as jobs) from their terminals during day-shift, the job limit is always set so as to permit a single compile at a time on each system. Our philosophy is that day-shift computer resources should be optimized to the advantage of the customer working from a terminal. Batch jobs, custom forms and long reports are relegated to swing and grave-shift. Our customers are asked (and generally comply) to give us 24 hours notice on all requests. This allows us to schedule work for swing and grave. Priority jobs which fail overnight are run on day-shift if necessary.

Each system has 32 ports. Twelve of these are direct-dial with Bell 212 modems; the rest are hardwired. All ports are currently in use. In addition to the hardware in the Computer Center itself, we have 73 terminals located within DP, the ESD, and at school buildings and district offices. We are in the

process of installing Type Ahead Engines in many of our terminals. Within Data Processing, the programmer analysts, data control technicians, data entry and secretarial personnel each have terminals at their desks. We support the concept of non-shared terminals for our employees, believing that if they have easy and ready access to the tools needed to do their work, the overall productivity of the department will be enhanced.

The Computer Operations supervisor periodically issues a technical update such as the one shown in Appendix D. In addition, lists of terminals with their locations, serial numbers, and other pertinent information are maintained on word processing. A port assignment list is also maintained in this fashion.

Hardware Performance History forms (Appendix E) are completed for all equipment requiring service. For our customers, these forms are filled out by the respective data control technician after the problem has been validated. Within the Data Processing Department, each employee completes forms for his or her equipment as necessary. The computer operators keep the records for equipment in the computer room. This type of information, filed chronologically by vendor and device, has proven invaluable for recurring problems and for summary information about vendor responsiveness.

The hardware in the Computer Center is cleaned on a regular basis. The Equipment Maintenance and Cleaning Schedule (Appendix F) is initialed by the computer operator after assigned cleaning tasks are accomplished.

The Tape Library with its 1500 magnetic tapes is an integral part of the Computer Operations section. Tapes are checked out by completing a Request for Magnetic Tape form (as shown in Appendix G) and filling out a corresponding tape label (as shown in Appendix H). These forms are available at the input/output counter in the Computer Operations area, accompanied by a current listing of available tapes. A Magnetic Tape Removal Request (Appendix I) must be completed for any tapes which leave the Computer Operations area. Tape library information is updated daily, and several weekly reports in various sort sequences are provided to all users. In addition, management reports are available in summary form for each user and application as well as by date issued. The Tape Library System is available from the San Jose swap tape.

About 400 tapes are designated for system backup. A partial dump is taken nightly on each system and a full dump is made weekly. Fourteen sets of partials are retained on a cyclical basis as are six months' worth of complete system backups. Tapes are archived to a vault in a remote location according to an established schedule.

The computer operators make extensive use of an internally developed system known as JES, the Job Entry System, to determine what jobs are to be run, and what tapes and forms are required. All jobs are scheduled through JES. Complete documentation and software for JES are available via the San Jose tape swap. Essentially, JES performs two interrelated functions: the

creation of jobstreams by the insertion of parameters into a predefined template, and the building and maintenance of a job schedule. The templates are skeleton jobstreams which define prompts, parameters and defaults. Special parameters for forms, tapes, priority, estimated CPU time, name of submitter, and sequencing conditions are provided. The preparation of JES jobstreams is the responsibility of User Services. Basic JES templates are provided by Systems and Programming to User Services, but the specific prompts and defaults are determined at the discretion of the data control technicians who submit the corresponding jobs.

The actions of JES are controlled both by the contents of the template file and by interactive commands. The following commands are available:

ASK	Causes JES to accept input from the terminal
CANCEL	Cancels a job which has been entered onto the schedule
CHANGE	Changes the parameters for jobs on the schedule
DELETE	Removes jobs from the schedule (only the operator may issue the delete command)
DISPLAY	Displays a message on the terminal
DONE	Terminates input to ASK command
EDIT	Invokes LARC editor
EXIT	Terminates input to JES
ENTER	Enters a job onto the schedule
LIST	Lists a jobstream
PROMPT	Redefines the JES prompt character
RESET	Resets all parameters (to undefined)
SEQUENCE	Initiates a sequence of jobs
SHOWFORM	Displays special form information
SHOWJES	Displays the schedule
SHOWTAPE	Displays tapes required by jobs
SPOOK	Runs the program SPOOK
STREAM	Streams jobs on the schedule
USE	Specifies another file to be used as input
VERIFY	Displays the current set of parameters

Requests for assistance from Computer Operations for work not

scheduled through JES are made via the Request for Operations Support form shown in Appendix J.

JES originally came into being as a solution to a problem regarding jobstream modifications and maintenance. In our environment, we rarely run the same job twice. Each jobstream is used for multiple customers. Programs are parameter driven. A single jobstream might be modified a dozen times for a single schedule (that is, with a dozen different sets of options for a dozen different customers). JES is the ultimate solution to the problem this situation used to cause.

The accounting structure (identical) on our two systems is set up in the following manner. An account is generally equivalent to an application. A user may be an individual customer, a building, a district, or a department. For standard applications, the groups within an account are: JOB, the jobstreams; PUB, the object programs; DOC, the documentation; SOURCE, the source programs; DEBUG, the programmer's work area; X1, X2, etc., a school, district, or other data base. Changes to the accounting structure are requested via the forms shown in Appendix K.

The accounting structure is the basis of JAS, the Job Accounting System. This system produces a detailed daily summary of the work done each shift, as well as periodic (monthly, quarterly) reports of resource utilization by customer. It is the basis for billing for most of our paying customers, and the document from which budget estimates are obtained for fund

transits within the agency. The Job Accounting System is available from the San Jose tape swap. Sample outputs are shown in Appendix L. JA400, available with or without cost figures, and by user or by application, allows costs to be attached to each customer for each measurable resource. JA410 lists all jobs run by a given user during a given time period. These reports are distributed regularly to all customers.

Departmental

All data processing employees keep track of their time via PURS, the Personnel Utilization Reporting System. PURS, complete with documentation, is available from the San Jose tape swap. A sample PURS timesheet is included in Appendix M. Reports on personnel utilization are generated monthly for the director and for supervisors, and annually for customer review.

The routing of trade publications is the responsibility of the data processing receptionist, as is the general maintenance and organization of all materials in the Technical Library. New employees are provided with a list of all periodicals received on which they may indicate those publications they would like to read. A routing for each new subscription is established with the first issue received and maintained by the receptionist. Three forms (Appendix N) assist the receptionist in cataloging information for the Technical Library - the Technical Library Book

Information form, the Publication/Subscription Information form, and the Publication Circulation Routing Record.

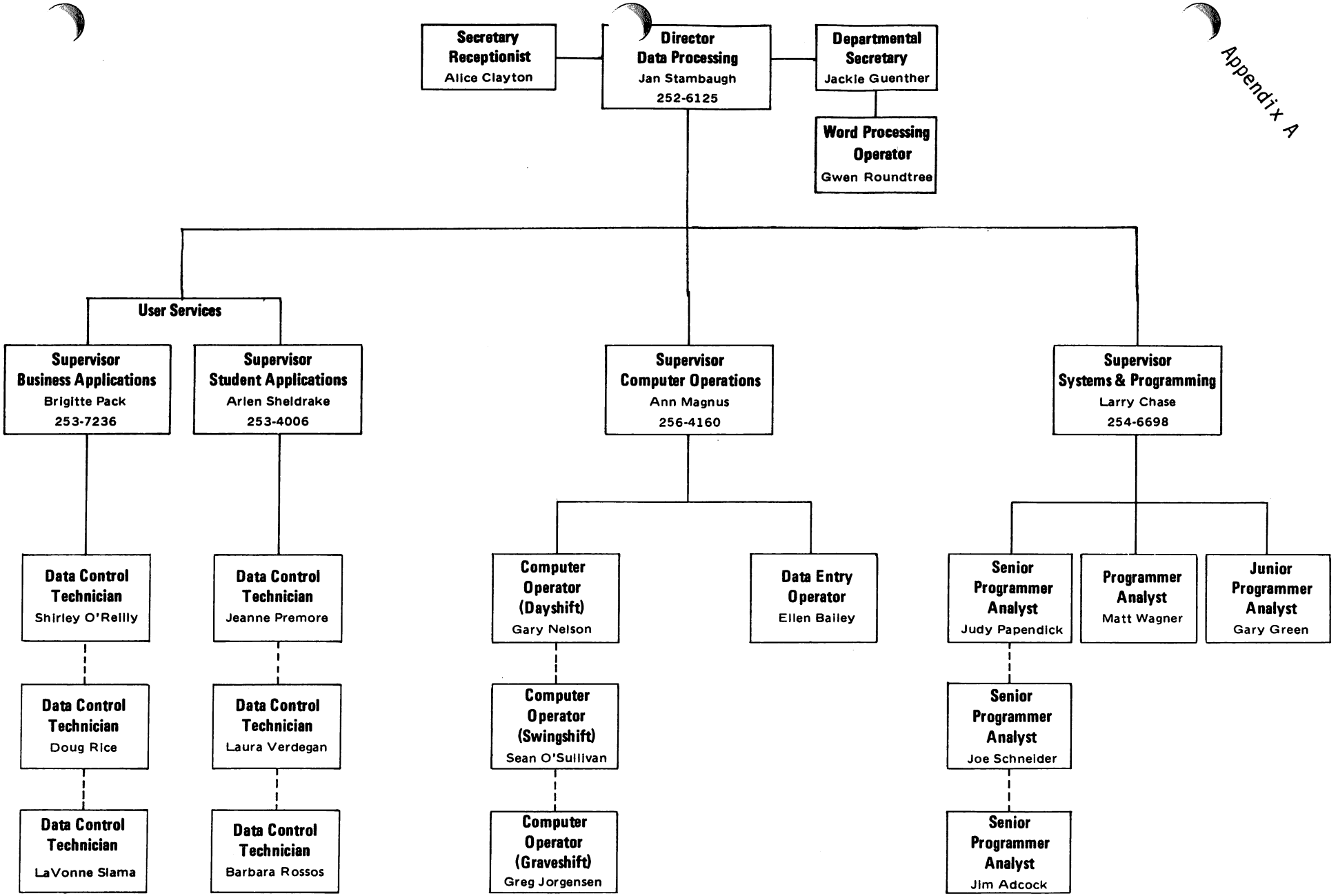
Conclusion

At the Multnomah County Education Service District, we pride ourselves on being up-to-date, organized, and state-of-the art. We are a union shop. We are neither understaffed nor overstaffed. The work is challenging and the people are talented. We have a good time and take pride in our accomplishments.

We have an excellent rapport with Hewlett-Packard, particularly the Tualatin Customer Engineering organization, which is second to none. We are actively involved in NOWRUG, the Northwest Regional Users Group, because we feel it is important to be in touch with other users in our area.

If you are ever in Portland, stop in and see what an HP3000-based Education Service Bureau is all about.

Index to Appendices



DATA PROCESSING DEPARTMENT

MULTNOMAH COUNTY EDUCATION SERVICE DISTRICT

12/05/79
JS

MULTNOMAH COUNTY EDUCATION SERVICE DISTRICT

DATA PROCESSING DEPARTMENT

MENU OF SERVICES TO LOCAL DISTRICTS

1980-81

1. ADDR - Addressing System

   Address label generation. This system is separate from student or parent address labels that come from student data bases, as well as mailing labels for personnel, which come from employee data bases.

2. FAAS - Fixed Asset Accounting System

   System which records and reports the insurance-related and audit-related information for inventory and capital equipment.

3. LARC - Word Processing System

   System which accommodates the processing of words instead of data. Best used for documents which require frequent updating.

4. PERPAS - Personnel/Payroll System

   a) Personnel

      An extension of the payroll system. Limited credentialing, budget modeling, contract preparation and certification information included.

   b) Payroll

      Comprehensive payroll system, integrated with financial and personnel systems.

5. POBAS - Program Oriented Budgeting and Accounting System

   a) Accounts Payable

      Comprehensive expenditure accounting and check writing system.

   b) Accounts Receivable

      1) Comprehensive revenue accounting.
      2) Customer master-file, invoice statements and aging reports.

c) Handbook II Revised

The generic term for the general ledger accounting system, meant to imply compatability and reporting requirements with USOE and state regulations.

d) Budget Preparation

An integral part of the financial system.

6. SAS - Student Assignment System

a) Scheduling Loader

System for student class forecasts.

b) Scheduling Arena Option

Support for the arena scheduling process.

7. SIS - Student Information System

a) Mark Reporting

System which maintains continual class enrollment of each student and produces report card and transcript information.

b) Family Information

Reporting of family information for public and non-public school students.

c) Competency Evaluation

Parallel system to mark reporting which tracks and reports status of each student in meeting district competencies.

d) Enrollment

Collection and maintenance of student enrollment data.

e) State Attendance Reporting

Collection of daily attendance data, and generation of school register and state reports.

f) Handicap Child Census

System which maintains and reports information required by federal law PL94-142.

MULTNOMAH COUNTY EDUCATION SERVICE DISTRICT

DATA PROCESSING DEPARTMENT

MENU OF SERVICES TO ESD PROGRAMS

1980-81

1. Administration/Personnel/Business Office

   a) Word Processing (supported for the entire agency)

   b) Address Label System

   c) Personnel/Payroll System

   d) Program Oriented Budgeting and Accounting System

   e) Fixed Asset Accounting System

2. Alternative Schools - Donald E. Long, Wynne Watts

   a) Student Information System - Attendance

3. Attendance Department

   a) Student Information System - Attendance

4. Cooperative Purchasing

   a) System to support cooperative purchase of consumable supplies

5. Instructional Support Services

   a) Student Programming

      Student programs written in FORTRAN and COBOL compiled and returned the following day

   b) Software maintenance of HP2000 programs as requested by Curriculum Computer Specialist

   c) Film Booking and Distribution for Educational Resource Center

   d) Film Preview System for Educational Resource Center

   e) Address Label System

6. Measurement and Experimental Research

   a) Survey Achievement Testing (METRO, LEVELS)
      Aptitude and Achievement Testing (GATB, ICL)

      ESD program for all districts plus non-ESD clients

   b) PE Testing

      Accommodates both AAPHER format and district based testing.

      Used by Centennial, Parkrose, Gresham Elementary and David Douglas

   c) Course Goals, Item Bank, Rausch Analysis

   d) Technical support for Administrative Scoring Centers

   e) Technical support for Cognitive Skills Mapping System

   f) Special programming requests

7. Production

   a) Billing system for production and mailroom charges

8. School Health Services and Volunteer Nurse Program

   a) Activities Analysis Reporting

9. Special Education

   a) Personnel System for Special Education staff

   b) Activities Analysis Reporting

REQUEST FOR PROGRAMMING SERVICES

№ 2464

SYSTEM: ☐ AV ☐ COOP ☐ EV ☐ PERPAS ☐ POBAS ☐ SAS ☐ SIS ☐ OTHER (specify): _____

☐ PROGRAM NAME/FUNCTION: _____
☐ STREAM CODE/NUMBER: _____
☐ OTHER _____

☐ check here if no existing program or stream

DESCRIBE CORRECTION, MODIFICATION, OR DESIRED MODULE: _____

Appendix C

REQUEST INITIATED

REQUESTED BY: _____ APPROVED BY: _____

DATE REQUESTED: __ __/__ __/__ __ DATE APPROVED: __ __/__ __/__ __ DATE REQUIRED: __ __/__ __/__ __

☐ check here if for cost estimate only

ACCEPTANCE STATUS:

☐ accepted as is for in-house processing
☐ accepted with modifications as noted
☐ rejected for reason indicated below

☐ accepted for processing by outside agency/individual
Sent to: _____
Date sent: __ __/__ __/__ __
Date completed: __ __/__ __/__ __

REQUEST EVALUATED

By: _____ DATE: __ __/__ __/__ __

ASSIGNED TO: _____

TIME REQUIRED:	COMPLETION DATE:
_____ hours estimated	__ __/__ __/__ __ anticipated
_____ hours actual	__ __/__ __/__ __ actual

DOCUMENTATION:
☐ unaffected ☐ attached

COMPLETED ASSIGNMENT ACKNOWLEDGED BY:

_____ Supervisor S & P Date __ __/__ __/__ __

_____ Director DP Date __ __/__ __/__ __

PROGRAMMER/ANALYST REMARKS: _____

INITIALS: _____

REQUEST COMPLETED

	SYSTEM I	SYSTEM II	SYSTEM 7	SYSTEM A	SYSTEM B
MEMORY (in bytes)	512K	1024K	20K	112K	128K
NUMBER OF INCOMING PHONE LINES MODEM TYPE	4 BELL 212	8 BELL 212	5 BELL 407	30 TMPLX 103C	30 TMPLX 103C
FIRST PHONE NUMBER IN ROUTING SEQUENCE					
NUMBER OF ISS DRIVES (23.5M)	NONE	NONE	NONE	2	2
NUMBER OF 7905 DRIVES (15M)	1	NONE	NONE	NONE	1
NUMBER OF 7925 DRIVES (120M)	3	4	NONE	NONE	NONE
NUMBER OF IBM 5022 MODEL 1 (4.9M) DRIVES	NONE	NONE	1	NONE	NONE
APPROXIMATE TOTAL SPACE (IN SECTORS)	1,464,843	1,875,000	19,200	183,593	242,186
RJE (BISYNCH) SYS-7 TO 3000	NO	YES	YES	NO	NO
READER/PUNCH	YES	NO	NO	NO	NO

ACCOUNTS

System I: (Business Applications)
COOP, DATACON, DCS, DP, FAAS, INFOBASE, LARC, LIB, MAINLIB, MANUALS, ME, PERPAS, POBAS, QLIB, REGO, SUPPORT, SYS, TAPELIB, WP

System II: (Student Applications)
ADDR, AV, COURSE, DATACON, DCS, DP, EV, EVAL, EVPW, GAMES, GI, LARC, LEVELS, METCOM, PE, REGO, SAS, SE, SH, SIS, STN, SUPPORT, SYS

System 7: Field Developed Program (FDP)

System A: Parkrose Project, Parkrose Reading, CIS, CADET, CLASP, GAMES, Problem Solving

System B: CAI, GAMES, Parkrose Reading, Parkrose Math, Problem Solving

HARDWARE PERFORMANCE HISTORY

DESCRIPTION OF EQUIPMENT: _____ REPORTED BY: _____
TYPE OR SERIAL NUMBER: _____
LOCATION: _____ DATE: _____ TIME: _____ AM PM
ADDRESS: _____
CONTACT: _____
PHONE NUMBER: _____

DESCRIPTION OF PROBLEM OR INCIDENT (check one):

- ☐ PREVENTIVE MAINTENANCE: Note any unusual arrangements or occurrences
- ☐ MALFUNCTION: Describe below
- ☐ OTHER: Describe below

VENDOR NOTIFIED	DATE	TIME	NOTIFIED BY
1st CALL			
2nd CALL			
3rd CALL			
VENDOR ON SITE			

CHRONOLOGICAL DESCRIPTION OF VENDOR CONTACTS, SERVICE PERFORMED, AND OUTCOME:

Date Resolved ___ ___ / ___ ___ / ___ ___ Time Resolved ___ ___ : ___ ___ AM PM Total Downtime ___ ___ hours ___ ___ minutes

FOR CE REMARKS:

SIGNATURE: _____ DATE: ___ ___/___ ___/___ ___

EQUIPMENT MAINTENANCE AND CLEANING SCHEDULE

A= TAPEDRIVES	E= READER	I= ISS DRIVES	M= SUPPLY SHELVES
B= PRINTERS	F= READER-PUNCH	J= SYS-7	N= BURSTER
C= 3000'S CPU	G= 7905 DRIVE	K= TERMINALS	O= DECOLLATOR
D= 2000'S CPU	H= 7925 DRIVES	L= SYS CONSOLES	P= SCANNER

EFFECTIVE DATE: _____

		DAY	INITIAL	SWING	INITIAL	GRAVE	INITIAL
WK 1	MONDAY	A-B-C-D		A		A	
	TUESDAY	A-N-O-P		A-B-G-H		A	
	WEDNESDAY	A		A		A-B-L	
	THURSDAY	A-E		A		A	
	FRIDAY	A-B		A-J		A	
WK 2	MONDAY	A		A-B		A-K	
	TUESDAY	A-F-L		A		A-B	
	WEDNESDAY	A-N-O-P		A-I		A	
	THURSDAY	A-B		A		A	
	FRIDAY	A-E		A-B		A	
WK 3	MONDAY	A		A		A-B	
	TUESDAY	A		A		A-C-D	
	WEDNESDAY	A-B-F		A		A	
	THURSDAY	A-N-O-P		A-B-G-H-L		A	
	FRIDAY	A		A		A-B-M	
WK 4	MONDAY	A-E		A		A	
	TUESDAY	A-B		A-I		A	
	WEDNESDAY	A-N-O-P		A-B		A-L	
	THURSDAY	A-F		A		A-B	
	FRIDAY	A		A		A	

AM/AC
R2/6/79

COMPUTER OPERATIONS

REQUEST FOR MAGNETIC TAPE

TAPE NUMBER: ☐☐☐☐ – ☐

ISSUE DATE: ☐☐/☐☐/☐☐
MONTH DAY YEAR

REQUESTOR: ☐☐☐☐☐☐☐☐☐☐

PROJECT CODE: ☐☐☐☐☐☐☐☐

TAPE CONTENTS:

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

ANTICIPATED SCRATCH DATE: ☐☐/☐☐/☐☐

SCRATCH AUTHORIZED BY: ______________________

DATE: ___ / ___ / ___

MCESD-DP
FORM #J107
12/17/79

Requestor	Tape Number	Project Code

Tape Contents:

Density	Create Date	Operator	Reel # / Next Reel
800 1600			_____ of _____ J109

Requestor	Tape Number	Project Code

Tape Contents:

Density	Create Date	Operator	Reel # / Next Reel
800 1600			_____ of _____ J109

TAPE MAINTENANCE RECORD

SERIAL NUMBER	CHECK AFTER EACH USE	DATE CLEANED
DATE OF INITIAL USE		

BRADY
727 W. GLENDALE AVE.,
MILWAUKEE, WIS. 53201
MANUFACTURERS OF TAB LABELS AND COMPUTER ROOM SUPPLIES

TAPE MAINTENANCE RECORD

SERIAL NUMBER	CHECK AFTER EACH USE	DATE CLEANED
DATE OF INITIAL USE		

BRADY
727 W. GLENDALE AVE.,
MILWAUKEE, WIS. 53201
MANUFACTURERS OF TAB LABELS AND COMPUTER ROOM SUPPLIES

COMPUTER OPERATIONS

MAGNETIC TAPE REMOVAL REQUEST

TAPE NUMBER: ☐☐☐☐-☐

PROJECT CODE: ☐☐☐☐☐☐☐☐

DESTINATION: _____

_____

_____

EXPECTED DATE OF RETURN: ☐☐ / ☐☐ / ☐☐

☐ CHECK HERE IF RETURN NOT ANTICIPATED

REQUESTED BY: _____

DATE REQUESTED: ☐☐ / ☐☐ / ☐☐

APPROVED BY: _____

SUPERVISOR

MCESD-DP
FORM #J116
12/17/79

REQUEST FOR OPERATIONS SUPPORT

Submitted by: _____

Date Submitted: ____/____/____

Date Required: ____/____/____

P.U.R.S. CODES	Customer	Application

Function:

- ☐ Data Entry
- ☐ Verify
- ☐ Interpret
- ☐ Burst
- ☐ Decollate
- ☐ Scan
- ☐ Other (Specify): _____

Special Instructions:

Operator Remarks:

Date Completed: ____/____/____ Operator Initials: _____

FORM # C201 9/79

Request for Modification to System Accounting Structure
USER

User Name = _____

Account Name = _____

PASS = _____ (password)

HOME = _____ (home group)

☐ create user
☐ purge user
☐ modify user parameters

CAP = SF ND IA BA (default) (user capabilities – circle all that apply)
SM AM AL GL DI OP CS UV CV PH DS MR PM

SET CATALOG UDC. PUB ☐ yes ☐ no

SET CATALOG UDC. UTIL. SYS ☐ yes ☐ no

Job Accounting Customer = _____

Job Accounting User = _____

Requested by: _____ Date requested: _____

Comments: _____

_____

Modifications completed by: _____ Date completed: _____

Comments: _____

_____

FORM #J212 MCESD-DP 3/79

Request for Modification to System Accounting Structure
GROUP

Group Name = _____

Account Name = _____

PASS = _____ (password)

☐ create group
☐ purge group
☐ modify group parameters

FILES = _____ (maximum filespace in sectors)

CPU = _____ (maximum CPU time in seconds)

CONNECT = _____ (maximum connect time in minutes)

CAP = IA BA PH DS MR PM (group capabilities – circle all that apply)
(default)

ACCESS = _____ (file access)
(default = (R, X: ANY; A, W, L, S: AL, GU) for PUB and (R, X, S, W, A, L: GU) for all other groups)

Job Accounting Customer = _____

Job Accounting User = _____

Requested by: _____ Date requested: _____

Comments: _____

_____

Modification completed by: _____ Date completed: _____

Comments: _____

_____

FORM #J211 MCESD-DP 3/79

Request for Modification to System Accounting Structure
ACCOUNT

Account Name = ⌊_____⌋

PASS = ⌊_____⌋ (password)

FILES = _____ (maximum filespace in sectors)

CPU = _____ (maximum CPU time in seconds)

CONNECT = _____ (maximum connect time in minutes)

CAP = AM AL GL SF ND IA BA (default)
SM DI OP CS UV CV PH DS MR PM (account capabilities – circle all that apply)

ACCESS = _____ (file access)
(default = (R, X, W, A, L: AC) except for SYS account)

☐ create account
☐ purge account
☐ modify account parameters

Purpose of Account: _____

_____

Requested by: _____ Date requested: _____

Comments: _____

_____

Modification completed by: _____ Date completed: _____

Comments: _____

_____

FORM # J210. MCESD-DP 3/79

DATA PROCESSING SORT SEQUENCE IS USER, APPLICATION

COMPUTER USAGE SUMMARY REPORT

JANUARY TO JUNE, 1979 Appendix L

CUSTOMER: GRESHAM ELEM DIST

USER	APPLI-CATION	#JOBS	#SESS	JOB CPU	SESS CPU	TOTAL CPU	CONNECT TIME	LINES PRINTED FORMS	LINES PRINTED REGULAR	CARDS PUNCHED	AVERAGE DISC SPACE	MAXIMUM DISC SPACE	COST
D MCCARTY MS	SAS	272	214	18050	2922	20972	2919	4554	123067	20	22622	234120	1,677.76
	SIS	449	448	87169	11712	98881	6158	234462	392688	0	24703	231849	7,910.48
	TOTAL	721	662	105219	14634	119853	9077	239016	515755	20	47325	465969	9,588.24
DISTRICT OFFICE	ADDR	24	17	663	166	829	151	15476	4295	9	545	4949	66.32
	POBAS	72	50	6616	595	7211	771	1225	76514	0	7453	109795	576.88
	TOTAL	96	67	7279	761	8040	922	16701	80809	9	7998	114744	643.21
EAST GRESHAM ES	SIS	219	122	17997	1446	19443	840	1701	122145	32	6100	49642	1,555.44
	TOTAL	219	122	17997	1446	19443	840	1701	122145	32	6100	49642	1,555.44
G RUSSELL MS	SAS	144	147	21537	2773	24310	2085	1703	139309	0	10195	115636	1,944.80
	SIS	457	404	118491	8972	127463	10336	613876	563564	0	32393	293891	10,197.04
	TOTAL	601	551	140028	11745	151773	12421	615579	702873	0	42588	409527	12,141.84
GRESHAM ADDENDUM	SIS	14	37	131	370	501	298	341	1140	0	1549	14304	40.08
	TOTAL	14	37	131	370	501	298	341	1140	0	1549	14304	40.08
GRESHAM ELEMS	SIS	0	0	0	0	0	0	0	0	0	0	0	.00
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	.00
HIGHLAND ES	SIS	207	124	18927	1367	20294	788	828	116178	225	6750	56564	1,623.52
	TOTAL	207	124	18927	1367	20294	788	828	116178	225	6750	56564	1,623.52
NORTH GRESHAM ES	SIS	193	108	22185	1278	23463	568	863	141570	37	7623	66899	1,877.04
	TOTAL	193	108	22185	1278	23463	568	863	141570	37	7623	66899	1,877.04
POWELL VLY ES	SIS	231	111	19150	1595	20745	834	977	120531	32	6341	65753	1,659.60
	TOTAL	231	111	19150	1595	20745	834	977	120531	32	6341	65753	1,659.60
WEST GRESHAM ES	SIS	185	116	18206	1344	19550	804	1787	118541	195	6638	54088	1,564.00
	TOTAL	185	116	18206	1344	19550	804	1787	118541	195	6638	54088	1,564.00
CUSTOMER	TOTAL	2467	1898	349122	34540	383662	26552	877793	1919542	550	132912	1297490	30,692.96

COST = .080 * SESSION CPU + .080 * JOB CPU

DATA PROCESSING

JOB REQUEST SUMMARY REPORT

JANUARY TO JUNE, 1979

CUSTOMER: GRESHAM HIGH DIST USER: GRESHAM HS

APPLICATION	JOB DESCRIPTION	NUMBER JOBS	TOTAL CPU	LINES PRINTED FORMS	LINES PRINTED REGULAR
SAS	BATCH MAINTENANCE	12	2382	0	14407
	CONFLICT MATRIX	3	795	0	1886
	COURSE MASTER LIST	2	72	0	9184
	COURSE VERIFICATION	1	824	0	15708
	INTERACTIVE SESSIONS	244	9803	0	0
	STU VERIFICATION	6	2549	41629	83779
	TOTAL	268	16425	41629	124964
SIS	ADDRESS LABELS	12	1977	16224	2434
	ATTN QUARTERLY LIST	6	2143	456	319
	ATTN REGISTER	28	24076	0	77106
	BATCH MAINTENANCE	183	22060	0	82754
	CLASS LISTS	2	5211	64697	127
	COURSE SECTION LIST	20	5268	76117	330300
	CREATE STU ATTN FILE	6	2894	0	637
	CRS REQ SCANNERS	1	258	14616	67
	CUMULATIVE MARK LIST	6	16083	92304	38407
	INTERACTIVE SESSIONS	478	8865	0	122
	MARK DISTRIBUTION	3	2601	0	36449
	MARK SCANNERS	3	4779	67725	362
	MARK TRANSCRIPT LABL	3	7850	58173	754
	MARK VERIFICATION	2	2649	0	32313
	MASS CHANGES	2	3612	0	415
	MPA EDIT LIST	1	0	0	0
	MPA RANK REPORT	6	2892	0	40180
	OTHER JOBS	1	10	0	0
	PROGRESS REPORTS	7	15759	153194	492
	SIS TO SAS	1	205	0	48
	SPECIFIC MARK LIST	10	6226	0	72261
	STU CHECK DIGIT LIST	5	671	0	12192
	STU DIRECTORY	9	1200	0	26278
	STU NAME LABELS	1	127	877	55
	STU SCHEDULES	25	66222	511011	192613
	TOTAL	821	203638	1055394	946686
	USER TOTAL	1089	220063	1097023	1071650

EMPLOYEE _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

STARTING MONTH _ _

YEAR _ _

PERSONNEL UTILIZATION REPORTING SYSTEM

TIME SHEET

PAGE _____ OF _____

CUSTOMER (USER)	APPLICATION	FUNCTION	DAY __ TIME	DAY __ TIME	DAY __ TIME	DAY __ TIME	DAY __ TIME	TOTAL TIME	QTY 1	QTY 2	COMMENTS
			:	:	:	:	:	:			
			:	:	:	:	:	:			
			:	:	:	:	:	:			
			:	:	:	:	:	:			
			:	:	:	:	:	:			
			:	:	:	:	:	:			
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			:	:	:	:	:	:			
		TOTALS	:	:	:	:	:	:			

PURS 101
7/79

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FORM J201 MCESD-DP 7/78

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FORM # J203 MCESD-DP 7/78