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## An Ontario Libraries' Network, or Cooperative Entanglement

While I accepted the invitation to discuss the College Bibliocentre at this Clinic, I cannot say that I did so with equanimity. Quite apart from many organizational difficulties, the systems both in operation and in varying stages of development at the College Bibliocentre, have evolved from practical emersion without the benefit of the finite planning or initial test and research procedures from grant aids that many others have experienced. This is why I adopted the latter part of my title for this paper.

I was asked particularly to discuss the techniques we are using to acquire the necessary input to the various systems. However, if I was asked to underline what I considered to be the major problems facing the development of a central technical service unit, the technicalities of how to input would be the least concern. The major problems are those beyond the technological requirements—how to achieve the degree of coordination required and, in particular, how to overcome the financial hazards which face such an organization.

Indeed, the prime motivation for establishing such a center as ours generally arises from financial restrictions imposed on educational establishments which, in turn, lead to less funds for libraries. However, in order to create such an organization and the systems it needs to implement, money is required.

Meanwhile, those librarians who are already harassed by the depletion of their own budgets look to centralization of technical services for immediate cost savings. At the same time, the librarians impose on the center what they consider to be the significant system requirements, without due regard to their cost effectiveness to meet library user needs. Thus, the bibliographic descrip-

tion of an item to distinguish it from any other item in the store has become the base of operation at international, national and local levels. Within an educational institution this is not the criteria of the majority of users of the library, because they are aware that the bibliographic description may define its physical identity but, as users, they are more concerned with intellectual identity. The result of this syndrome makes the operation of developing a central service, removed from direct contact with the ultimate user by a user librarian, rather like negotiating a greasy pole balanced on the snouts of two performing seals.

Historically, the CB (Colleges of Applied Arts and Technology Bibliographical Centre) was developed when the Ontario government legislated the formation of twenty colleges in Ontario in 1967. It was created to purchase, catalog and process "packaged" libraries for each college, so that when they opened their doors in that year each would have a library even if it had no staff. Subsequently, the organization of this center, which began under the care of William Ready at McMaster University, was transferred to Toronto and established under a broadly based charter as a nonprofit-making organization. It is now partly financed by the Ontario Ministry of Colleges and Universities, with its policies approved by a users' advisory committee whose membership includes three college presidents, four directors of college learning resource centers, and four faculty members.

The functions of the center are defined as follows:

1. To cooperate with publishers and other distributors in the establishment of a selective dissemination service for academic staff through college resource center directors to assist them in the selection of books, audiovisual and other resource materials. Such a service will incorporate a continuing central exhibition of print and audiovisual resources.
2. To facilitate the coordination of activities associated with the production of audiovisual aids in the colleges, paying particular attention to the suitability of programs for exchange purposes and the cataloging and retrieval of such material.
3. To negotiate with appropriate organizations on any matter which may facilitate the satisfactory application of usage of media to the benefit of the colleges.
4. To act as the central acquisition unit for the majority of the book and nonbook materials required by the college resource centers.
5. To act as the central processing and cataloging unit for all college resource book and nonbook material.
6. To establish systems which will facilitate the more efficient use of

- knowledge acquired by the colleges, so that others can retrieve information they need for their studies and problemsolving.
7. To establish in consultation with the colleges, central collections of more expensive material or material required for short periods of time which can be loaned as and when required.
  8. To provide a professional center for the exchange of information and expertise in the development, administration and utilization of college resource centers.
  9. To facilitate the use of any special reprographic or distribution facilities necessary for the center to the advantage of the colleges, with particular attention to microrecording.
  10. To act in consultation with the appropriate staff at the Ministry of Colleges and Universities as a publisher/distributor of college-produced learning packages establishing copyright procedures wherever necessary.

It may be of interest to specify the objectives which were used in compiling the 1973/74 budget.

1. All colleges participating in the operation will receive a computer tape, regularly updated, of their holdings cataloged by the College Bibliocentre for use in automated circulation systems and for general statistical purposes.
2. A biannual book catalog with weekly cumulations will be produced for each college audiovisual collection cataloged by the College Bibliocentre.
3. A biannual author index with weekly cumulations to the print resources of each college which have been cataloged and processed by the College Bibliocentre.
4. A biannual title index with weekly cumulations to the print resources of each college which have been cataloged by the College Bibliocentre.
5. A biannual union catalog with weekly cumulations to material cataloged and processed by the center to meet college needs for Canadian studies.
6. In order to fulfill the requirement for book catalogs for those seeking guidance on resources to match subject requests, the College Bibliocentre will begin to implement a special automated indexing procedure utilizing the British PRECIS system.
7. To assist in the indexing of government documents and to provide college resource centers users with simple access tools, the College Bibliocentre will coordinate their records for government publications with the data base developed by the University of Guelph.
8. The Videotape Film Distribution Service, which was offering a limited

service for a few months during 1972/73, will offer a more extensive facility to faculty for a full year of operation.

As these functions and objectives indicate, the center is responsible for creating a machine-readable data base for all materials required for individual learning in the colleges. As each college differs in the administrative organization of such materials, the center may be dealing directly with a number of people with different responsibilities in the same establishment—librarians, audiovisual directors, educational resource directors—to name but a few. Additionally, many colleges have several campuses widely dispersed and often autonomous in control and expenditure. There are now fifty-seven separate units involved, shortly to be doubled (again by the stroke of a pen) with the inclusion of all the schools of nursing which have been transferred to the same network. To provide some indication of the scale of activities in the year 1972-73 the center processed 160,133 items, of which 57,305 were new titles added to the college holdings file.

Operating in 1969 with inadequate capital and premises more suited to the raising of mushrooms, the center was finally housed in a new building in January 1971, and has now reached a period of reasonable financial stability, though not financial adequacy. This year, 1973/74, for example, the government operating grant was slashed from \$1,387,000 to \$900,000. In order to obtain additional operating funds it has been necessary to charge \$1.00 for all items ordered through the CB and \$1.00 for all items cataloged and processed by the center. It is too early to judge the impact of these charges on our users, but they will undoubtedly alter the workload. It never costs the librarians anything to order or process within their own library.

I stated earlier that systems grew more from practical necessity than planned efficiency—although that should not be interpreted that we lacked an overall plan or, should I say, had no concept of the value of creative planning. Figure 1 (at the end of this article) is our goal: one input and a series of modules to meet each system requirement. Obviously, in order to achieve it, much more was required than our own system development. Simply stated, the chart points to:

1. Publishers and producers cooperating with national libraries (Why has Bowker produced yet another computer tape to U.S. resources repeating data appearing on LC MARC and adding *nothing* helpful to ultimate users of the bibliographic store?);
2. International coordination for machine-readable tape exchange (We profess to the need, but the past year has shown how we beg to differ.);
3. National library networks with dedicated computer/s and computer

- personnel wise in library record manipulation (more complex than commercial system requirements); and
4. Cooperative technical services created with common user profiles and interests.

The CB did have control of the last: the potential in Ontario of a dedicated library computer at the University of Toronto. When we began, however, there was no indication of a Canadian National MARC Tape Service.

In those early days the University of Toronto had problems of its own to resolve, so that it was even doubtful whether it could take on a major role for libraries in the province. Fortunately, the manager of the computer unit of the Ministry of Education agreed not only to assist with system development, but to accept the role of intermediary in the provincial network which we considered must emerge.

At that time, while the major objective was still the production of a multimedia catalog to the resources of the colleges, it was deemed necessary to give greater priority to the development of an effective acquisition and accounting system. Apart from the fact that many colleges had inadequate bibliographic resources, and few, if any, qualified librarians, the complexity of the book trade in Canada, relying on imported titles from England and the United States, created considerable difficulty for college acquisition procedures. There was also a further complication; very few of the college requirements were to be found on the available MARC tapes, so that the immediate use of these tapes for the order system was considered impracticable.

The system which finally emerged has been documented,<sup>1</sup> but the following details may be helpful. Colleges may send their orders for any item, whatever the media, on a seven-part order form (figure 2). If the item has been purchased directly by the college, or received as a gift, the college may still send the item to the CB for processing and cataloging. If so, details are still input into the system for adequate control. College shelflist cards or a copy of the title page are acceptable alternatives—although these are not input into the automated system.

When the three top copies of the order form are received at the CB, copy 3 is immediately filed (by order number) to provide manual back-up. From the first two copies the information is verified, corrected or added to as necessary and then coded for the supplier. Copy 2 is sent to the supplier and copy 1 is used to keypunch the data into the system. At this stage the computer produces three punched cards coded with the order number. Originally this was considered to be unnecessary, but it was discovered that most receiving update errors arose from incorrect recording of the order number.

The three punched cards are filed with the order slip in an open-order file at the receiving department. If the item is clearly identified as one previously processed by the center and not likely to be a new edition when received, catalog cards, book card and spine label are produced and filed with the order slip and punched cards. Approximately 48 percent of the orders can be processed in this way.

At the same time the computer compiles an order status report by college in author sequence, together with two indices by order number and by author. Copies of each college order status report are sent to each college fortnightly. These reports provide complete information on the status of any order in the system (figure 3).

Initially the system is updated by either a status report from the supplier (figure 4), or the receipt of the item (figures 5 and 5a). If a supplier status report indicates the work is out of print, the record is held in the system for three weeks and then automatically deleted unless the college requests a search of the antiquarian market. If the order has been placed with a publisher or supplier who has no Canadian rights (a substantial problem in Canada), the order department searches for an appropriate supplier and issues a re-order update (figure 6) so that the system can then generate a reorder (figure 7). A separate subsystem maintains an agent/publisher file for this purpose. At present this file contains 3,500 addresses including North American and European suppliers.

If neither item nor report is received within a specified period a follow-up request (figure 8) will enable the system to generate a follow-up chaser. In fact, the CB is also chased by means of a computer listing if the item has been received at the CB but has been held in a department too long (figure 9).

The system is flexible in that:

1. Each order number represents an individual title, but volume or part numbers added to the order number can identify each volume or part uniquely. Thus, multivolume works may be received without prior knowledge that the original order was indeed a multivolume work, by the addition of the volume or part number on the receiving transaction card.
2. A series of books may be ordered on one order number. Individual titles in the series may be received separately and are assigned an "ID discriminator" or identification code. This code is one digit, and uniquely identifies each title in the series, as the volume number uniquely identifies each volume in a multivolume work.

On receipt of an item which is part of the 48 percent already processed, the catalog cards, book card and spine label are matched; the book is jacketed and the item is ready for dispatch. As it is possible for this to be done within 48 hours, the system is capable of accepting a combined receiving/shipping update.

Of the 52 percent which have no catalog cards, once the items have been received they are checked once more against the union catalog. A further 16 percent are matched—that is they have been processed by the CB on a previous occasion; catalog cards can be pulled from stock; spine labels and book cards produced; the item jacketed; and then prepared for shipping.

Those items which have not previously entered the system meanwhile proceed to catalog for a search against the MARC records and against the various British, Canadian and LC catalogs. If a match is made, approximately 24 percent, the entry is photographed, verified, printed and the item proceeds through the rest of the system. The remaining 12 percent proceeds to original cataloging.

When items reach the shipping department they are packed in a shipping box and a shipping update (figure 10) is entered. The system then generates invoices (figure 11). One invoice acts as the packing slip and one is sent separately to the college financing officer. This year it is hoped that the second invoice will not be necessary for reasons which will be apparent later. Whenever necessary, through faulty or incorrect billing, a credit note can be issued and invoice adjusted by a separate update (figure 12).

In addition to the invoice, six colleges have availed themselves of an additional service. The CB can supply with each package an input to an automated circulation system in the form of tape records or punched cards. These records comprise data for author, title, accession number and LC call number. As the author and title are those input at the time of order input to the system it was considered probable that a large percentage would be incorrect. It certainly requires more care on the part of the colleges completing the purchase order. However, the additional verification at the CB generally insures reasonable accuracy and very few records need to be corrected by the colleges. At present three formats are available as described in table 1.

While the cataloging data base may eventually provide this data, at present the cost of providing it from the order system is so little that it may be the most economical technique. Thus for a box of fifty items, punched cards for all items in format 3 would be \$0.23 and a tape in format 1 would be \$2.20.

Apart from these aspects of the system there are additional subsystems

	<i>Position</i>	<i>Field Length</i>	<i>Description</i>	
Format No. 1 (Magnetic tape, 9 track, 800 b.p.i.)	1-7	7	Accession Number	
	8-9	2	Copy Number	
	10-39	30	Author	
	40-79	40	Title	
	80-109	30	LC Call Number	
Total record length: 112 characters	110-112	3	Media Code	
Format No. 2 (Magnetic tape, 9 track, 1600 b.p.i.)	1-7	7	Accession Number	
	8-9	2	Copy Number	
	10-15	6	Filler	
	16-33	18	LC Call Number	
	34-40	7	Filler	
	41-100	60	Author	
	101-160	60	Title	
	161-164	4	Filler	
	165-167	3	Media Code	
Total record length: 171 characters	168-171	4	Filler	
Format No. 3 (Punched card)	CARD 1	1-7	7	Accession Number
		8-9	2	Copy Number
		10	1	Card Number (always = 1)
	CARD 2	11-80	70	Author
		1-7	7	Accession Number (same as card 1)
		8-9	2	Copy Number (same as card 1)
		10	1	Card Number (always = 2)
	CARD 3	11-80	70	Title
		1-7	7	Accession Number (same as cards 1 & 2)
		8-9	2	Copy Number (same as cards 1 & 2)
		10	1	Card Number (always = 3)
		11-40	30	LC Call Number
		41-42	2	Department Code
		43-45	3	Media Code
	46-80	35	Blank	

**Table 1. Formats**

(There are always three punched cards for each record. We hope to standardize using formats 1 and 3.)

for financial and management control.

On receipt of the supplier's invoice a supplier reconciliation total card (figure 13) is completed and input into the system. A comparison is then made with the individual items received against that invoice number so that



discrepancies can be indicated in a supplier reconciliation summary (figure 14). Essentially the report pinpoints inaccuracies either at the CB or the supplier's end and insures that payment is not made for books listed on the invoice but not received.

The budget subsystem is particularly important and could save additional costs to the colleges this year. Each college will now pay 10 percent of its anticipated expenditure for the year through the CB on the first day of each of the first ten months of the year. Its account will then be debitted as items are shipped to it, and the budget system will provide the necessary statements.

The budget subsystem currently generates three reports:

1. The statement of commitment and expenditure (figure 15) which shows the funds committed (potential expenditures as represented by orders not yet received from the supplier nor shipped to the colleges) and actual expenditures (actual net costs including charges for binding, shipping, etc., for shipped items). This statement can be prepared for each department in a college, and is further broken down between print and nonprint materials. An average cost of print items for the campus is also given.
2. An analysis of item cost by subject (figure 16) showing the average cost of an item in a particular subject (LC class number groupings) and comparing it against the average cost for the previous six months.
3. An analysis of item cost by media (figure 17) which, again, illustrates the average cost of different nonbook media. A detailed media code has been devised not only for this purpose but as a technique for searching the catalog data base.

Finally, a management information subsystem assesses the quality of supplier service to the CB. The report shows average time between order and receipt of items at the CB, the number of CB chasers generated and the level of discounts provided.

Even though detailed costing of the operation is under constant study, it is not easy to isolate each system nor to provide data for accurate comparison. There are no hidden costs at the CB as the unit is separately financed and all overheads, including computer costs, are distinguishable. However, the enormous variety in the colleges and their input costs preclude a factual costing of the total system from raising an order in the college to placing the item on a shelf. Nevertheless, there are some significant pointers. One college has never joined the system. Its library's operating costs are now three times those of any comparable college in the system.

However, before commenting on costs, a brief study of the main cataloging function might be appropriate. The CB has developed a machine-readable catalog of all the items it has processed. While LC MARC tagging was not utilized, the system was so devised that all significant elements could be compatible with the data appearing on MARC tapes to facilitate access in any network proposal.

It should be realized that in the adoption of the system it was necessary to maintain the flow through the organization and the existing college card catalogs. However, the main objective would be the provision of more adequate user-orientated indices and retrieval facility. As a multimedia approach was necessary, it was decided that there could be only one format, but the media code would indicate the kind of data appearing within a field in the system. In other words, we did not choose to accept the LC pattern of creating separate MARC formats for each media.

One other significant concern emerged. To meet the needs of users in an educational environment it was deemed necessary to consider more, rather than less, search codes. The CB is now applying the Intellectual Level Code recommended by the Canadian MARC Task Force, literacy and numeracy codes, course or program codes, a copyright code (for audiovisual material) and bilingual subject headings. In order to meet projected search and print requirements it was decided to adopt the British PRECIS system. This has only recently occurred and further development is still necessary.

In order to create the machine-readable catalog three techniques were adopted:

1. A punch card is input with accession number and LC MARC number for all items located at the time the item is searched against the LC catalog data. This LC MARC record is then input into the CB data base together with any codes or additional data required.
2. Data for items originally cataloged are prepared on Flexowriters. A subsidiary tape is created from which catalog cards are prepared and printed. The master tape containing fully coded data is converted to magnetic tape and input into the CB catalog data base.
3. Each catalog card for those items forming the retrospective file is coded and then typed using an OCR font, optically scanned and so input into the data base. Pre-1968 items for which an LC catalog entry is photographed to prepare card sets, are also input into the system in this way.

The data so obtained is now in the process of being structured and formatted for subsequent manipulation.

To facilitate this system and the proposals for future developments the CB has entered into a contract with the University of Toronto. Eventually this will mean full participation in a system of shared cataloging with other users, but that is still under development.

In the meantime, the University of Toronto operates on our behalf a new books listing which is a combination of records appearing on LC and BNB MARC tapes. These are arranged according to the major programs offered by the colleges (figure 18). A copy is sent to each college in loose-leaf format, so that only the appropriate sheet need be given to a member of the faculty. It is hoped shortly to incorporate the Canadian MARC records and, possibly, the French MARC records. There are two points of special interest: a list for Canadian studies uses a search on the LC area code—a very simple search device; and the input of C.I.P. records has led to us placing orders with publishers prior to their announcement of publication, a fact which has caused some astonishment from publishers. However, there is one major disadvantage of this service expressed by the faculty. Too many items are not relevant to their requirements, *not* by subject but by *level*. It is infuriating that national MARC services still refuse to apply an intellectual level, so that it is impossible to distinguish kindergarten from school, or college from postgraduate studies. As most publishers use simple codes in their catalogs, it is no longer true that publishers will not agree to the use of such codes.

The first major manipulation of the CB machine-readable catalog has been the production of the union catalog of films (that is, film, videotape and filmloops). This will be regularly updated and cumulated. There are three sequences: (1) the subject catalog arranged under the main college course programs, (figure 19); (2) a name/title index compiled by the computer (figure 20); and (3) a subject index compiled manually to PRECIS configuration but which eventually will be machine generated (figure 21).

Perhaps a simple statement at this stage will suffice on costs. The total cost of administering the CB with all that I have described, excluding \$54,000 required for creating the retrospective machine-readable catalog (approximately 180,000 records), but including all the functions as outlined at the beginning of this paper, divided by 160,133 (the total number of items we processed for the year 1972-73), creates a unit cost of \$5.60. While this is a very basic costing, it can be compared with the Universities of California and Saskatchewan, and demonstrates that automation need not waste money, but to the contrary, can save while improving services. It need not have cost us as much if we could have controlled the information we needed to input into the system more effectively.

I do not think the user requires much of the bibliographic data we input—and I think he would prefer more valid information on intellectual

content. However, the technical library service is the servant of librarians so, while we must wait patiently for the real user to comment, we can still hopefully cater to some of his unvoiced needs by using codes which no one but we can see at input. Sooner or later librarians will understand that cost effectiveness means providing services for the patrons at a price they can afford.

#### REFERENCE

1. *College Bibliocentre Acquisition and Accounting System Description Manual*. Toronto, College Bibliocentre, 1970, p. 18; and *College Bibliocentre Acquisition and Accounting System Operating Manual*. Toronto, College Bibliocentre, 1971, p. 50.

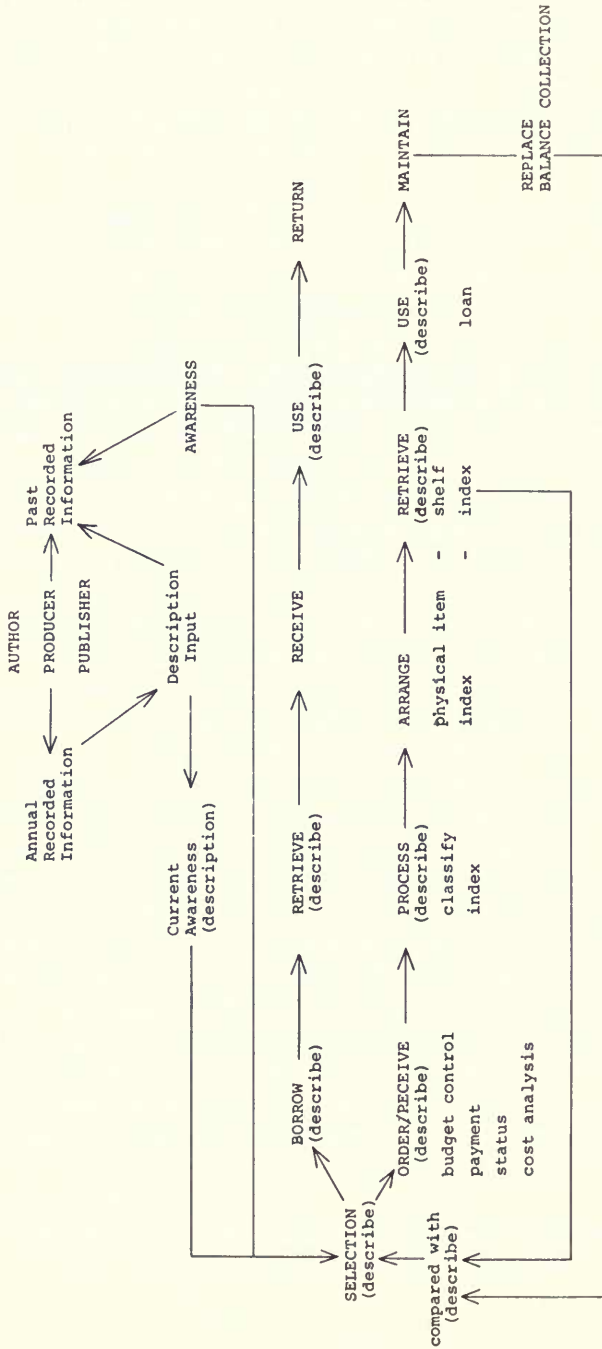


Fig. 1. Flow Chart of College Bibliocentre Functions

Computer then automatically creates a new record with the same information as the first volume input.

**Fig. 2. Seven-Part Purchase Order Form**  
(To be Completed by the Purchasing College)

First 3 parts sent to CB.  
Information verified; corrected or added to as necessary.  
Supplier code applied.

Copy 1 to Key punch  
Copy 2 to Supplier  
Copy 3 to File (back-up only)

*Information keypunched:*

Order number	(9 digits)	mandatory)	
	( )	)	
Volume	(3 digits)	optional )	
	( )	)	
Part number	(2 digits)	optional )	Forms key to system
	( )	)	
Supplement indicator	(1 digit)	optional )	
	( )	)	
Author	(120 digits)	optional	
Title	(variable)	)	
	( )	(1 of 2	
Series Title	(variable)	) (mandatory	
Department Code	(2 variable)	optional	
Supplier Code	(2 variable Canadian		
	(		
	(7 variable Foreign		
Country of Publication		(1 digit)	
Date of Publication		(4 digits)	optional
Edition		(6 digits)	optional
Number of copies ordered		(3 digits)	mandatory
Date of Order		(6 digits)	not keypunched, automatically applied by computer on addition to master file
Currency Code		(1 digit)	Can., U.S., Brit., French, German
Set price indicator		(1 digit)	For volume sets
Estimated Price		(6 digits)	mandatory (\$10.00 per item automatically assumed by computer if not input.)
Media Code		(3 digits)	
"Copy-previous-data" Code		(1 digit)	for multivolume sets where information is same for all volumes—one card for each additional volume or part is punched with order no., vol. no., pt. no., etc. and this code Computer then automatically creates news record with the same information as the first volume input.

16. MAR. 73	COLLEGE BIBLIOCENTRE ORDER STATUS REPORT	ACCOUNT NO. 21-3021-3895-0601	PAGE ALL CUMULATIVE PAGE 02207
AUTHOR / TITLE	ORDER NO.	ORDER DATE	ORDERED REC. NO. SHIPPED
MEREDITH, GEORGE WORKS OF...	301097764	MAR. 05 73	1 1 0
MERGES, CONSOLIDATIONS AND BIG BUSINESS	1 RECEIVED - ORIG. CATALOGING..		
MERGES, CONSOLIDATIONS AND BIG BUSINESS	30100547C	JAN. 17 73	1 0 0
MERRILL, JOHN CALHOU FOREIGN PRESS	1 RE-ORDERED .....		
MERRYWEATHER, F.S. BIBLIOMANIA	301094393	JAN. 28 73	1 1 0
MERTES, J.E. CREATIVE SITE EVALUATION FOR THE SMALL RETAILER	1 BINDING .....		
MESAROVIC, MIHAJLO D. VIEWS ON GENERAL SYSTEMS THEORY: PROCEEDINGS SYSTEMS SYMPOSIUM-2 NO	301074566	FEB. 19 73	1 0 0
MESEROLE, HARRISON T. SEVENTEENTH-CENTURY AMERICAN POETRY	1 ORDERED .....		
MESSICK, MARK JOHN EDGAR HOOVER: AN INQUIRY INTO THE LIFE AND HIS RELATIONSHIP T	301041777	JAN. 30 73	1 0 0
MESSNER, RICHARD HOW TO SELL PRINTING AND LITHOGRAPHY VOL. 001	301089514	MAR. 15 73	1 0 0
METCALF, M. STARTING & MANAGING A SMALL BUSINESS OF YOUR OWN	1 NO. CAN. RIGHTS - RE-ORDERED		
METHOD FOR DETERMINING THE SPEED OF SENSITIZED PHOTOGRAPHIC MATERIALS	301056235	MAR. 15 73	1 0 0
METHOD FOR DETERMINING THE SPEED OF SENSITIZED PHOTOGRAPHIC MATERIALS	1 RE-ORDERED .....		
METROPOLITAN FUND REGIONAL NEW TOWNS: ALTERNATIVES IN URBAN GROWTH FOR SOUTHEAST MIC	301096200	MAR. 15 73	1 0 0
METROPOLITAN TORONTO SCHOOL BOARD HIGH-RISE AND MIXED-USE STUDY (73)	1 NO. CAN. RIGHTS - RE-ORDERED		
	1 MO. CAN. RIGHTS - RE-ORDERED		
	301051774	OCT. 26 72	2 0 0
	2 OUT OF PRINT - SEARCHING		
	301041764	DEC. 21 72	1 0 0
	1 ORDERED .....		
	301094424	JAN. 30 73	1 0 0
	1 ORDERED .....		
	301052737	JAN. 17 73	1 0 0
	1 RE-ORDERED .....		
	301092586	MAR. 30 72	2 0 0
	2 RE-ORDERED .....		

Fig. 3. College Order Status Report



**STATUS UPDATE**

1	2	3	4	5	6	7	8	9
ORDER NO								
10	11	12	13 14		15	16		
VOL			PT		SUP	ID		
59	60 61 62		79	80				
STAT	NO DAYS AVAIL		CARD	UPDATE				

**Fig. 4. Status Update Input Form**

Report from publisher indicating delay of item translated to status code and input to system. Although normally a punched card is used, the information input is as shown above.

1	1	2	3	4	5	6	7	8	9				
2	ORDER NUMBER												
1	10	11	12	1	13	14	1	15	1	16			
2	VOL.			PART			SUP		ID				
1	17	18	19	20	21	22	23	24	25				
SUPPLIER CODE													
1	26	1	27	28	29	30	31	32					
CURR.		UNIT PRICE											
1	33	34	35	36	37	38	1	39	40				
NET PRICE							% DISC.						
1	41	42	43	1	44	45	46	47	48				
NO. COPIES REC'D.				SUPPLIER'S INVOICE NO.									
1	49	50	51	52	53	54	55	56	57	58			
1	59	1	60	61	62	1	63						
STATUS		NO. DAYS AVAIL.				SET							
1	17	18	19	2	20	21	22	23	24				
NO. COPIES SHIPPED				CB INVOICE NO.									
2	25	26	27	28	2	29	30	31	2	32	33	34	35
BINDING				JACKETING				U.S.B.E.					
2	36	37	38										
MAILING													
2	39	40	41	42	43	44	45	46	47				
ACCESSION NO.													
2	48	49	50	51	52	53	54	55	56	57			
CLASSIFICATION NO.													
1	58	59	60	61	62	63	64	65	66	67			
1	68	69	70	71	72	73	74	75	76	77			
2	78	1	79	80	RECEIVING SHIPPING					1			
REF.		CARD NO.		UPDATE									

On receipt of item this form is filled out as far as indicated by the asterisk. Order number MUST be present. Vol., pt. sup. is normally identical to prepuunched cards, although additional vols. or parts may be added at this stage if necessary. Supplier code is only input if different from supplier to which order was mailed.

Currency code is input if necessary and the computer will convert to Canadian currency to bill ordering College. Conversion rates are input monthly.

Unit price Two of these must be present. Computer calculates missing field.  
 Net price present.  
 Discout missing field.

Number of copies received must be present.

Supplier's invoice number or date must be present. Status code present if item is to be bound, or, in the case of A/V material, the item is going to original cataloging.

Set price indicator if the set price is charged against this volume. All subsequent volumes on this order number will be invoiced as no charge.

If the number of copies received is less than the number of copies ordered, the computer will create a new record for the outstanding portion and identify it with an "ID discriminator" code. New cards will be produced for this to be replaced in the open order file.

Fig. 5. Receiving Update

1										9
ORDER NO.										
10			12	13	14	15	16			
VOL.				PART		SUP.		ID		
17										26
										76
	78	TITLE								
		79								80
CARD NO.			UPDATE							

Fig. 5a. Series Title Receiving Update

If the item received is one in a series or standing order, a second card will be punched with the specific title.

R E O R D E R   U P D A T E

1		3	4							9	10		12	13	14	15	
order number										vol.		pt.		sup.			
16	17		19							25	26						
ID	supplier code									publisher's							
name (if different from supplier)																	
										58	59	60		62			
										stat. no.		days avail.					
										72		1		80		4	

Fig. 6. Reorder Update

QTY	AUTHOR	ORDER NO
		DATE
TITLE		ISBN
		YEAR
PUBLISHER		EDITION
		PRICE
AGENT/PUBLISHER		PLACE
•		L.C. CARD NO
•		VARIATIONS
•		REF
•		NO CAT
•		NO CARD
		NO BINDING

**COLLEGE BIBLIOCENTRE**  
 20 RAILSIDE RD., DON MILLS, ONT., CANADA  
 TEL. 416 447-5137      TELEX 06 219937

CB 04 FEB 71

Fig. 7. Reorder Form

New order form printed by computer on receipt of reorder update.

This is automatically produced by computer on time basis of country of publication and location of supplier. Supplier's name and address are printed by computer. Perforated form can be torn off, checked by publisher and mailed back to the CB since the address is printed on the reverse.

<u>FOLLOW UP ONLY</u>	[ ]	<u>THIS IS NOT AN ORDER</u>
PLEASE ADVISE STATUS OF OUR ORDER NO. XXXXXXXXX ORDERED ON MM DD YY FOR 99 COPY(IES) OF WHICH THE BALANCE OUTSTANDING IS 99 COPY(IES)		
***NO. OF CHASER. 001***		
AUTHOR:		
TITLE:		
<input type="checkbox"/> 1. TEMPORARILY OUT OF STOCK <input type="checkbox"/> 2. NOT YET PUBLISHED <input type="checkbox"/> 3. OUT OF PRINT <input type="checkbox"/> 4. NO CANADIAN RIGHTS	<input type="checkbox"/> 5. NOT OUR PUBLICATION <input type="checkbox"/> 6. OTHER	
IF YOU HAVE REPORTED OR SHIPPED ITEM WITHIN PAST FEW DAYS IGNORE THIS NOTICE		
COLLEGE BIBLIOCENTRE 20 RAILSIDE ROAD DON MILLS, ONTARIO, CANADA TELEX: 06-219837		
ATTENTION: ORDER SERVICES MANAGER		
PRINTED MATTER	[ ]	

Fig. 8. Follow-up Request

RECEIVED IN FULL

13-18-00 10-FEB-73

ORDER NO.	VOL	PT	SUP ID	AUTHOR	TITLE	SERIES	ACCESSION ORDERED	ACTION	QTY	BAL
151032103				BLAIS, MARIE-CLAIRE	JOUR EST NOIR		22/03/72	12/01/73	001	001
301007408				BUTLER, GEORGE B. C	FUNDAMENTALS OF ORGANIC C		0288789	13/11/72	17/01/73	001 001
123031419				CANEILL, ELIAS	CROWDS AND POWER		0118972	10/09/71	17/01/73	001 001
13-18-00	10-FEB-73				CATALOGUE & PROCESS					PAGE 045
ORDER NO.	VOL	PT <td>SUP ID</td> <td>AUTHOR</td> <td>TITLE</td> <td>SERIES</td> <td>ACCESSION ORDERED</td> <td>ACTION</td> <td>QTY <td>BAL</td> </td>	SUP ID	AUTHOR	TITLE	SERIES	ACCESSION ORDERED	ACTION	QTY <td>BAL</td>	BAL
283901989				ALLEN, ROBERT L.	BLACK AWAKENING IN CAPITA		0281223	25/01/73	25/01/73	001 001
281901445				AMERICAN HERITAGE	GREAT STORIES OF AMERICAN		0287447	25/01/73	25/01/73	001 001
251901454				AMERICAN HERITAGE	HISTORY OF AMERICAN BUSIN		0287449	25/01/73	25/01/73	001 001
13-18-00	10-FEB-73				OUT OF PRINT/FILE-HOLDIN					PAGE 001

RECEIVED IN FULL

13-18-00 10-FEB-73

ORDER NO.	VOL	PT	SUP ID	AUTHOR	TITLE	SERIES	ACCESSION ORDERED	ACTION	QTY	BAL
151039922				AEROPANE DIRECTORY	AFROPLANE DIRECTORY OF BR		26/05/72	08/01/73	001	001
123036637				ALDERSON, WROE & SHA	MARKETING AND THE COMPUTE		0103656	09/11/72	08/01/73	001 001
136041244				ALMOND, GABRIEL A.	APPEALS OF COMMUNISM					
13-18-00	10-FEB-73				BINDING					PAGE 015
ORDER NO.	VOL <td>PT <td>SUP ID</td> <td>AUTHOR <td>TITLE <td>SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td></td></td></td></td>	PT <td>SUP ID</td> <td>AUTHOR <td>TITLE <td>SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td></td></td></td>	SUP ID	AUTHOR <td>TITLE <td>SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td></td></td>	TITLE <td>SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td></td>	SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td>	ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td>	ACTION <td>QTY <td>BAL</td> </td>	QTY <td>BAL</td>	BAL
182031573				A	HIGHWAY TRAFFIC ACT		0284222	03/12/72	29/12/72	003 001
301901913				ANDERSON & SHERWIN	IF		07/10/71	12/01/73	001	001
131033834				ARTHUR, BEWADE H.	HORNES, STRINGS AND HARMON		0132425	24/10/72	10/01/73	001 001
13-18-00	10-FEB-73				AWAITING L.C.C.					PAGE 008

RECEIVED IN FULL

13-18-00 10-FEB-73

ORDER NO.	VOL	PT	SUP ID	AUTHOR	TITLE	SERIES	ACCESSION ORDERED	ACTION	QTY	BAL
251038181				ABC'S OF INDUSTRIAL	ABC'S OF INDUSTRIAL ELECT		09/11/72	03/01/73	001	001
151902599				ACQUISITION AND DEVEL	ACQUISITION AND DEVELOPME		20/12/72	03/01/73	001	001
161055284				ADAMS, RANDO F.	COMMON SAYS IT SALTU		15/11/72	03/01/73	001	001
13-18-00	10-FEB-73				RECEIVED IN FULL -CATLG.					PAGE 040
ORDER NO.	VOL <td>PT <td>SUP ID</td> <td>AUTHOR <td>TITLE <td>SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td></td></td></td></td>	PT <td>SUP ID</td> <td>AUTHOR <td>TITLE <td>SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td></td></td></td>	SUP ID	AUTHOR <td>TITLE <td>SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td></td></td>	TITLE <td>SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td></td>	SERIES <td>ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td></td>	ACCESSION ORDERED <td>ACTION <td>QTY <td>BAL</td> </td></td>	ACTION <td>QTY <td>BAL</td> </td>	QTY <td>BAL</td>	BAL
151037919				A	M L A INTERNATIONAL BIBLI	M-L-A. INTERNATI	11/01/72	12/01/73	001	001
151043748				AIRFRAME AND POWERPL	AIRFRAME AND POWERPLANT M		16/06/72	10/01/73	006	006
341041236				ARCHITECT'S JOURNAL	URBAN LANDSCAPE HANDBOOK		29/05/71	10/01/73	002	002

Fig. 9. Reminder Report

1	00	1	00	62	1	03
STATUS		NO. DAYS AVAIL			SET	
2			2			
NO. COPIES SHIPPED			CB INVOICE NO.			
2		2		2		
BINDING		JACKETING		U.S.B.E.		
2						
MAILING						
2						
ACCESSION NO						
2						
CLASSIFICATION NO.						
2		1	2	80	RECEIVING	1
REF.		CARD NO.	UPDATE	SHIPPING	3	

Fig. 10. Shipping Update

Information is filled in for a shipping update below the asterisked line.

- Number of copies shipped — mandatory
- CB Invoice Number — mandatory (1 invoice number is applied to each Box)
- Binding charge — if item was bound
- Jacketting charge — if item jacketted
- United States Book Exchange — if applicable
- Mailing — automatic 0 for CP items  
— automatic 10¢ for ordered items

Mailing is filled in only if the mailing charge should obviously be more or less than the automatic charge.

- Accession and copy numbers — mandatory
- Classification number — mandatory

Reference — if item is to be used as a reference book

INVOICE NUMBER

PLEASE REFER TO THIS INVOICE NO. ON ALL ENQUIRIES

INVOICE

SOLD TO:

SHIP TO:

PAGE NO

COLLEGE CAMPUS CODE

DATE DAY MONTH YEAR



college bibliocentre

20 railside road  
don mills, ontario  
telax 06-966764  
tel. 447-5137

PURCHASE ORDER NO.	DEPT. CODE	QTY	AUTNOR / TITLE	MEDIA	UNIT PRICE	TOTAL PRICE	ONC	ADDITIONAL CHARGES TO AMOUNT	NET AMOUNT DUE
BUSINESS OFFICE COPY									
ADDITIONAL CHARGE CODES 4 BINDING 5 DUST JACKETS B BOOK CHARGE. US B E									
									DELIVERY CHARGES
									INVOICE TOTAL

CLB 101 REV. 7 72

Fig. 11. Invoice Computer Printed from Shipping Data



**INVOICE ADJUSTMENT CARD**

1		3	4					9	10		12	13	14
Coll/Camp			Consec.#						Vol.#			Pt.#	
15	16	17	18	19	20	21	22	23	24				
Sup I.D.		Dept.		Media			Memo #						
25	26	27	28	29	30	31	32	33	34	35	36	37	
Invoice #				+/-		Amount							
38	39	40	41	42	43	44	45	46	47	48			
Quant.			Date						Print		Comment		
49													66
Author/Title													
67									78	79	80	F427	
										1	8		

Fig. 12. Invoice Adjustment Card

Used if credit or debit memo is necessary to adjust the invoice. Same form is used for printout as invoice. Stamped "CREDIT NOTE" if a credit.



10.02.73		SUPPLIER RECONCILIATION SUMMARY						PAGE 1
SUPPLIER CODE	INVOICE NUMBER	NO. OF COPIES INVOICED	NO. OF COPIES RECEIVED	TOTAL COST OF BOOKS RECEIVED	MAILING CHARGES	TOTAL COST	INVOICE TOTAL	AVERAGE DISCOUNT
ALDATHE	036968	2	2	19.45	0.00	19.45	19.45	
AMERFOU	1927	1	1	25.00	.30	.30	25.30	
AMNURSP	240173	9	9	82.35	3.00	85.35	85.36	
APERTUR	5981	1	1	8.50	0.00	8.50	8.50	
AUTOBOP	4319	1	1	4.95	.25	5.20	5.20	
CANFIEL	1896884	1	1	4.95	0.00	4.95	4.95	
CHAINST	8964	1	1	1.90	0.00	1.90	1.90	
DABNEYC	110173	4	3	26.50	1.50	28.00	34.20	
DABNEYC	1311973	2	2	30.95	0.00	30.95	32.40	
DABNEYC	131973	1	1	10.95	0.00	10.95	10.95	
DVPMENT	PREPD762	2	2	31.50	0.00	31.50	31.50	
FX	080273	1	1	0.00	0.00	0.00	0.00	

COLLEGE LIBLIOCENTRE									
STATEMENT OF COMMITMENT AND EXPENDITURE									
COLLEGE/CAMPUS 151									
BY MONTH FOR THE PERIOD AUG 1972 TO SEP 1972									
MAIN CAMPUS									
DEPARTMENT LIBRARY									
-----BIBLIOGRAPHIC MEDIA-----									
-----ALL OTHER MEDIA-----									
ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL
EXPENDITURE	AMOUNT COMMITTED	NO. ITEMS	EXPENDITURE	AMOUNT COMMITTED	NO. ITEMS	EXPENDITURE	AMOUNT COMMITTED	NO. ITEMS	EXPENDITURE
AND NOT SPENT	AND NOT SPENT	SHIPPED	AND NOT SPENT	AND NOT SPENT	SHIPPED	AND NOT SPENT	AND NOT SPENT	SHIPPED	AND NOT SPENT
OPENING BAL	11967.08	20561.09	32528.17	2508	2607.09	8310.77	10917.86	159	
AUG	6203.62	18864.21	25067.83	1158	56.64	8144.57	8201.21	17	
SEP	3264.10	17425.93	20690.03	529	1349.27	7151.27	8500.54	93	
CLOSING BAL	21434.80	17425.93	38860.73	4195	4013.00	7151.27	11164.27	269	
DEPARTMENT 21									
OPENING BAL	0.00	10.00	10.00	0	0.00	0.00	0.00	0	
AUG	0.00	10.00	10.00	0	0.00	0.00	0.00	0	
SEP	0.00	10.00	10.00	0	0.00	0.00	0.00	0	
CLOSING BAL	0.00	10.00	10.00	0	0.00	0.00	0.00	0	
DEPARTMENT 40									
OPENING BAL	3.22	390.00	393.22	1	0.00	0.00	0.00	0	
AUG	125.58	0.00	125.58	39	0.00	0.00	0.00	0	
SEP	0.00	0.00	0.00	0	0.00	0.00	0.00	0	
CLOSING BAL	128.80	0.00	128.80	40	0.00	0.00	0.00	0	
CAMPUS OPENING									
BAL	11970.30	20961.09	32931.39	2509	2607.09	8310.77	10917.86	159	
CAMPUS CLOSING									
BAL	21563.60	17435.93	38999.53	4235	4013.00	7151.27	11164.27	269	
NUMBER OF CP ITEMS SHIPPED..... 886									
AVERAGE COST FOR BOOKS ORDERED..... 6.41									
AVERAGE COST FOR BOOKS SHIPPED WITHOUT CHARGES... 6.25									

Fig. 15. Statement of Commitment and Expenditure

DATE PRINTED: 02-28-74		COLLEGE BIPOLICENALTYPE					
ANALYSIS OF ITEM COST BY SUBJECT							166
FOR THE SIX MONTHS ENDING JUNE 1973							
SUBJECT CLASS	SUBJECT DESCRIPTION	SUBJECTS COUNT	AVERAGE COST	PREVIOUS AVG COST	% INCREASE/DECREASE OVER PREVIOUS AVERAGE		
A	GENERAL WORKS	306	10.04	11.04	-9.06	5.46	
B749	PHILOSOPHY	140	6.30	0.00			
BF	PSYCHOLOGY	1058	7.75	0.00			
BL-EX	RELIGION	680	5.43	0.00			
BFZF	HISTORY AND DESCRIPTIVE GEOGRAPHY	5709	7.83	0.00			
G-GE	GEOGRAPHY	396	10.13	0.00			
GN	ANIMAL BIOLOGY	316	6.84	0.00			
GD	FOUNDACTION	61	7.53	0.00			
GT	VALUES & CUSTOMS	103	5.33	0.00			
GV	CITIZENSHIP	754	7.73	0.00			
H444	SOCIAL SCIENCES	171	6.33	0.00			
HP-101	ECONOMICS	711	7.4	0.00			
H444X	SOCIOLOGY	660	6.31	0.00			
J	POLITICAL SCIENCE	1336	7.33	0.00			
K	LAW	783	7.07	0.00			
L	COMPOSITION	2047	7.39	0.00			
W	OTHER	144	7.03	0.00			
N	FINE ARTS	3076	5.30	0.00			
Q-999	LANGUAGE & LITERATURE	1704	7.17	0.00			
Q21-999	FOREIGN	107	9.74	0.00			
Q26001-999	ITALIAN	21	5.00	0.00			
Q26001-999	SPANISH	99	3.85	0.00			
Q2	UNCLASSIFIED	1600	5.39	0.00			
Q3	UNCLASSIFIED	9304	3.74	0.00			

ANALYSIS OF ITEM CIRCULARITY MEDIA

FOR THE SIX MONTHS ENDING JAN 1973

MEDIA CODE	NO OF ITEMS	TOTAL COST	AVERAGE COST
000-010	35	524.50	15.27
020-025	5	290.21	59.04
025-029	1740	2363.42	1.36
030-039	7241	5725.19	0.79
040-059	359	4065.70	11.33
060-069	92	2007.00	21.82
100-179	205	5726.00	130.41
180-259	14	296.00	21.00
260-329	56	871.55	9.08
330-399	738	5782.15	7.82
400-499	251	2272.43	6.74
500-599	39	60.12	2.52
600-699	0	0.00	0.00
800-810	0	0.00	0.00
900	0	0.00	0.00

GENERAL ARTS AND SCIENCE CANADIAN STUDIES	MAR 01 '73	GENERAL ARTS AND SCIENCE CANADIAN STUDIES	PG. 31
C590 .B85 1971 Moorhouse, Eric Gelling. A brief record of the family of Benjamin Lionel Burdon and Wilhelmine Margaret Gelling. [Toronto, Author, 154 Wimbledon Road, Islington, Ont. 1971] 64 p. \$3.50 1. Burdon family. C71-4540 72194690		F551 .B37 Barry, James P. The fate of the lakes. Grand Rapids, Baker Book House [1972] 192 p. \$14.95 1. Great Lakes - Description and travel. 0801005876 72087744	
E75 .P75 Price, John A., 1933-. U.S. and Canadian Indian periodicals. Minneapolis, Training Center for Community Programs, University of Minnesota, 1971. 21 l. 1. Indians of North America - Periodicals. 72611897		F1059.W32 M69 1970 Moyer, William G. Bill Moyer's Waterloo County diary. Kitchener [Ont.] CHYM [c1970] 145 p. \$1.75 (pbk.) 1. Waterloo Co., Ont. - History. C71-3398 72169828	
E78.C2 B38 1973 Batty, Beatrice [Stebbing]. Forty-two years amongst the Indians and Eskimo. Boston, Gregg Press, 1973. p. (History of minority education) 1. Herden, John, Bp. of Mooseonee, 1828-1893. 2. Indians of North America - Canada - Missions. 3. Northwest Territories, Can. 0839801963 73001811		F1059.S.V38 R42 Reamen, George Elmore, 1889-1969. A history of Vaughan Township. [Toronto, Printed at the University of Toronto Press, c1971] 346 p. \$5.00 1. Vaughan Township, Ont. - History. C666 72170923	
E92 .I52 The Indian: assimilation, integration or separation. Scarborough, Ont., Prentice-Hall of Canada [1972] vi. 248 p. 1. Indians of North America - Canada - Government relations - Addresses, essays, lectures. 0134569547 C666 72004878		F1060 .R8 1971 Russell, Ralph Clifford. The Carlton Trail. [2d ed. rev.] Seekatoon [Sask.] Prairie Books, 1971. xv. 158 p. 1. Carlton Trail. 0919306306 C666 72197433	
E99.E7 R5413 1973 Rink, Hinrich Johannes, 1819-1893. Teles and traditions of the Eskimo. Boston, Gregg Press, 1973. p. (History of minority education) 1. Eskimos. 0839817770 73001790		F1089.7.A1 N6 Norris, John M. Strangers entertained. [Vancouver, British Columbia Centennial '71 Committee, 1971] 254 p. \$6.95 1. Minorities - British Columbia. 2. British Columbia - History. C666 72170963	
E183.B.C2 148 The Influence of the United States on Canadian development: eleven case studies. Durham, N.C., Duke University Press, 1972. xii. 269 p. 1. United States - Relations (general) with Canada - Addresses, essays, lectures. 0822302786 72081337		G525 .S5773 Snow, Edward Rowe. Ghosts, gales and gold. New York, Dodd, Mead [1972] xii. 263 p. \$5.95 1. See stories. 0396066585 72003936	
		G1189.S2 P4 1969 Pearson, R. E., comp. Atlas of St. John's, Newfoundland. [St. John's, Newfoundland, 1969] 1 v. (unpaged) 1. St. John's, Newfoundland - Maps. C666 72650133 /MAP	

Fig. 18. New Books Listing





TEACHER AND TECHNOLOGY.	00511
Communication theory and the new educational media.....	00667
TEACHER EDUCATION IN MODERN MATHEMATICS.	
Concept of functions.....	01116
Number fields.....	01117
TEACHER EDUCATION SERIES.	
Reading development in the secondary school .....	00729
TEACHER TRAINING FILM SERIES.	
Blocks a medium for perceptual learnings.....	00730
TEACHING FILM CUSTODIANS.	
Art director.....	01245
TEACHING JOHNNY TO SWIM. ....	01613
TEACHING MACHINES AND PROGRAMMED LEARNING. ....	00731
TEACHING THE WAY THEY LEARN: REMEDIATION OF LEARNING DISABILITIES.	
Learning series.....	00696
TEACHING THE 3'S, 4'S AND 5'S.	
Guiding behavior.....	00732
Setting the stage for learning.....	00733
TEAM BUILDING.	
Gellerman effective organization, #5 .....	00093
TECHNIQUES IN CHEMISTRY SERIES.	
Filtering.....	01536
Titrating with phenolphthalein.....	01533
Using a burette.....	01534
Weighing procedure.....	01535
TECHNIQUE 5: IF NON-VERBAL PSYCHOLOGICAL TESTING.	
.....	00511
TECTONIC MOVEMENTS.	
Geography.....	01434
TEE PEE PRODUCTIONS.	
Jazzoo.....	01191
TEENAGE REVOLUTION. ....	01665
TELEVISION AND THE WORLD. ....	00574
TELEVISION CAMERA TUBE. ....	01812
TELEVISION PICTURE TUBE. ....	01813
TELEVISION TRAINING FILMS.	
Video tape editing.....	00575
TELL ME IF ANYTHING EVER WAS DONE. ....	00365
TELL-TALE HEART. ....	01334
TENSILE AND COMPRESSIVE STRUCTURES.	
Engineering film.....	01881
TEST YOUR TASTE. ....	01777
TESTIMONY AND COURTROOM DEMEANOUR. ....	01018
TESTING LAB.	
Developing supervisory leadership skills Case study #3 .....	00064
TEVYE. ....	01335
TEXTURE AND LIGHT.	
Elements of art: texture series, #5 .....	00772
TEXTURE TECHNIQUES.	
Elements of art: texture series, #4 .....	00771
THAT WAR IN KOREA. ....	00989
THAT'S ME. ....	01336
THEORY OF THE LEAD-ACID STORAGE BATTERY. ....	01537
THEORY X AND THEORY Y: WORK OF DOUGLAS MCGREGOR.	
PT 1: DESCRIPTION.	

Fig. 20. Name/Title Index to Film Catalog

ENGLISH LANGUAGE			
Paragraphs. Composition	578		
Spelling	557		
Syntax	570		
Use of words	573		
ENGLISH LITERATURE			
See also			
DRAMA IN ENGLISH			
FICTION IN ENGLISH			
HUMOUR IN ENGLISH			
POETRY IN ENGLISH			
PROSE IN ENGLISH			
ENTERTAINMENTS			
See also			
CIRCUSES			
PERFORMING ARTS			
RODEOS			
SWIMMING DISPLAYS			
ENTOMOLOGY			
See also			
INSECTS			
ENTREPRENEURSHIP			
Role in economic growth	638		
ENVIRONMENT			
See also			
ATMOSPHERE			
LAND			
ENVIRONMENT			
Pollution	1849-1851		
Pollution. Ethics	635		
Pollution by refuse - Humorous treatments	1861		
ENVIRONMENT. Canada			
Conservation. Civilian Conservation Corps	271		
ENVIRONMENT ENGINEERING			
See also			
AIR CONDITIONING			
PRESSURISATION			
ENVIRONMENT PLANNING			
See also			
TOWN PLANNING			
ENVIRONMENTAL FACTORS			
See also			
ECOSYSTEMS			
ENVIRONMENTAL FACTORS			
Psychology	488		
EPIDEMIC ENCEPHALITIS. United States			
Public health measures	298		
EPIDEMOLOGY. Diseases caused by staphylococci	332		
EPIDEMOLOGY. Food poisoning caused by Staphylococci		1168	
EPEDEMOLOGY. Salmonellosis. Livestock		331	
EPIDEMOLOGY. Salmonellosis. Medicine	331	1167	
EPILEPSY			
See also			
CHILDREN WITH EPILEPSY			
EPILEPSY		333	
EQUATIONS			
Differential equations. Numerical solutions. Iteration. Newton method		1083	
EQUILIBRIA. Chemical reactions		1428	
EROSION. Stream beds		1437	
ESKIMO VISUAL ARTS. Cape Dorset. Northwest Territories		895	
ESKIMOS			
Legends			
Social change			
ESTRUS See OESTRUS			
ETHICS			
Environment. Pollution		635	
ETHIOPIAN-ITALIAN WAR			
1935-1936 See ITALO-ETHIOPIAN WAR			
1935-1936			
ETHNIC TYPES			
See also			
RACIAL TYPES			
EUGLENA GRACILIS		1138	
EUROPE			
Foreign relations. Munich Conference, 1938		924	
Hundred Years' War. Battle of Agincourt, 1415		987	
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See also			
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WESTERN EUROPEAN CAMPAIGNS			
EUROPEAN CULTURE			
1700-1800		945	947
c.1780-1900		946	947
EUROPEAN VISUAL ARTS			
1400-1500		945	951
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Fig. 21. Subject Index to Film Catalog