ABSTRACT
        The University of Calgary was the first university in
Canada to combine its library, computer center, and audiovisual
services into one unit. For a period of three years the Division of
Information Services administered and coordinated library services,
computer services, and communications media. The organizational
structure, objectives, and the operation of the Division are
described. The reasons for the creation and dissolution of the
Division give some guidance to institutions considering similar
integration of information resources and services. (SK)

INFORMATION SERVICES AT THE
UNIVERSITY OF CALGARY (LES SERVICES
D'INFORMATION A L'UNIVERSITE DE CALGARY)

Douglas Norrie
University of Calgary
Calgary, Alberta   T2N 1N4

ABSTRACT

At the University of Calgary, for a period of three years,
Library Services, Computer Services, and Communications
Media were administered and co-ordinated within a Division
of Information Services. The reasons for the creation and
dissolution of the Division give some guidance to institutions
considering similar administrative integration of information
resources and services. (Pour une periode de trois ans a
l'Universite de Calgary, les services de la Bibliotheque,
les services d'Ordinateur et les Moyens de Communications
etaient administre et coordiner par une division de Services
d'Information. Les raisons pour la creation et dissolution
de cette Division donne de la guidance aux autres institutions
qui considere l'integration administratif des sources et
services d'information.)

*"We are the first university in Canada to combine its library, computer
center, and audio-visual services into a Division of Information Services.
As a new unit it has a hard tow to hoe, but we believe that conceptually
we are on the right track."*

Response of the University of Calgary to the Report of the Worth
Commission on Educational Planning, October, 1972.

*" --- the --- model has not proven to be a suitable one --- it is
recommended that the Division of Information Services be disbanded --- "*

Report of GFC Review Committee on Division of Information Services,
May, 1974.

INFORMATION SERVICES

INTRODUCTION

The various units concerned with Information Resources (primarily
the Library, Computing Centre, and Audio-Visual Centre) on University
and College campuses have traditionally been separate entities, even
in some cases to the extent of reporting to different Vice-Presidents.
In recent years, this separation has been questioned and various attempts
have been made to coordinate the operations of these units. In some
cases, particularly among the Community Colleges, the Library, Computing
Centre, and Audio-Visual Centre have been merged into a single unit,
the Learning Resource Centre. Alternatively, where the constituent
units are large, coordination within a new administrative framework
has been proposed or effected. The best known example of such coordin-
ation is at Columbia University, where a new position, Vice-President
for Information Services has been created expressly "for the management
of the University's activities concerned with information resources and
the information handling capabilities that are required to support the
Columbia educational program." (Information, 1972) Although, "initially
only the University Libraries and the Computer Centre are involved,"
it was anticipated "that the full range of activities relating to
employing specialized instructional resources and technical aids to
instruction will also be included if and when developments in this
area occur." (Information, 1972)

A recent study (Veaner, 1974) of the institutional "political and
fiscal factors which inhibited the ready application of computers to
individual academic libraries" states, "Close examination of the library
and computer facility gives clear evidence that both deal with the same
commodity: information. Within the recent past, several computer facilities
have changed their designations to 'information processing' facilities or
centres. Several institutions, notably the University of Pittsburg and
Columbia University have coalesced the library and computer centre
organizationally or have both units reporting to a Vice- President for
Information Services. The recognition and furtherance of this natural
link may do much to reduce the potentially destructive competition which
can characterize the relationship between the two units."

An even more recent survey (Howard, 1974) of universities which
have "brought together under a senior administrator as his sole line
responsibility, the library and one or more other information handling
functions, "identified some twenty such institutions within the United
States and Canada. In the concluding section of this report, the
following view is presented: "The administrative integration of a
university's information services may be looked upon as a cornerstone
for interaction. It may be an effective first step to reduce potentially
destructive competition among information units for scarce resources and
at the same time bring about a coalescing effort to meet better a
university's information and communication needs."

Perhaps the most extensive reorganization of information resources
on a university campus in Canada took place in 1971 at the University
of Calgary when the Division of Information Services was created. This

INFORMATION SERVICES

Division was approved in October, 1970, commenced operation in August, 1971, and was disbanded in November, 1974. The present article describes the organizational structure of the Division and considers the reasons for its creation and dissolution.

THE CREATION OF THE DIVISION OF INFORMATION SERVICES

The year 1967 saw a growing interest on the University of Calgary campus in areas such as information storage and retrieval, computer assisted learning, and in the instructional and research applications of computers and media. Up to that time, little thought had, however, been given to co-ordination among these areas. Informal discussions between staff members in Education, Medicine, Engineering, Continuing Education, Social Welfare, and in the Library, Computer Centre, and Audio-Visual Centre led some of the faculty, in early 1967, to a realization of the interrelationship among information resource areas and of the advantages to be gained by coordinating their development. These beliefs came into focus at a meeting called by the Vice-President (Academic) on the 17th of February, 1967, to consider the participation of the University in the Inter-university Communications Council (EDUCOM), and to discuss associated matters in the information resources and educational technology field. The need for some organizational entity within the University to coordinate proposals and planning in these areas was recognized, and this led subsequently to a recommendation that, "a Committee be constituted to study and recommend on the integrated development of information resources and educational technology within the University." This proposal, considered by the Academic Planning Committee in May, 1967, resulted in the establishment of a Sub-committee on Information Resources and Educational Technology (SIRET).

In considering its terms of reference, the Sub-committee concluded:

"that its concern was with information -- or rather, with certain aspects of information. Information is meaning encoded in form. Education, the prime commission of a university, is the acquisition, comprehension, and integration of information, with the concurrent development of the powers of analysis and synthesis. The fundamental concern of the educator is thus with the meaning or content of the information. He is only secondarily concerned with the elements, structure, coding, processing, storage, retrieval, dissemination, and transfer (communication) of the information. These secondary areas are, however, those most relevant to the information-machine (as the computer has recently been called) and to the physical devices with which educational technology is associated. These areas were, therefore, those with which SIRET was primarily concerned." (SIRET, 1968)

After considering the functional relationship of the various areas of interest, the Sub-committee designated Task Groups to study the

```
          ┌─────────────────────────────────┐
          │     VICE-PRESIDENT (ACADEMIC)    │
          └─────────────────────────────────┘
                          │
          ┌─────────────────────────────────┐
          │  DIRECTOR OF INFORMATION SERVICES │
          └─────────────────────────────────┘
```

CHIEF LIBRARIAN	DIRECTOR OF COMPUTER SERVICES	DIRECTOR OF COMMUNICATIONS MEDIA
DEPARTMENT OF LIBRARY SERVICES	DEPARTMENT OF COMPUTER SERVICES	DEPARTMENT OF COMMUNICATIONS MEDIA
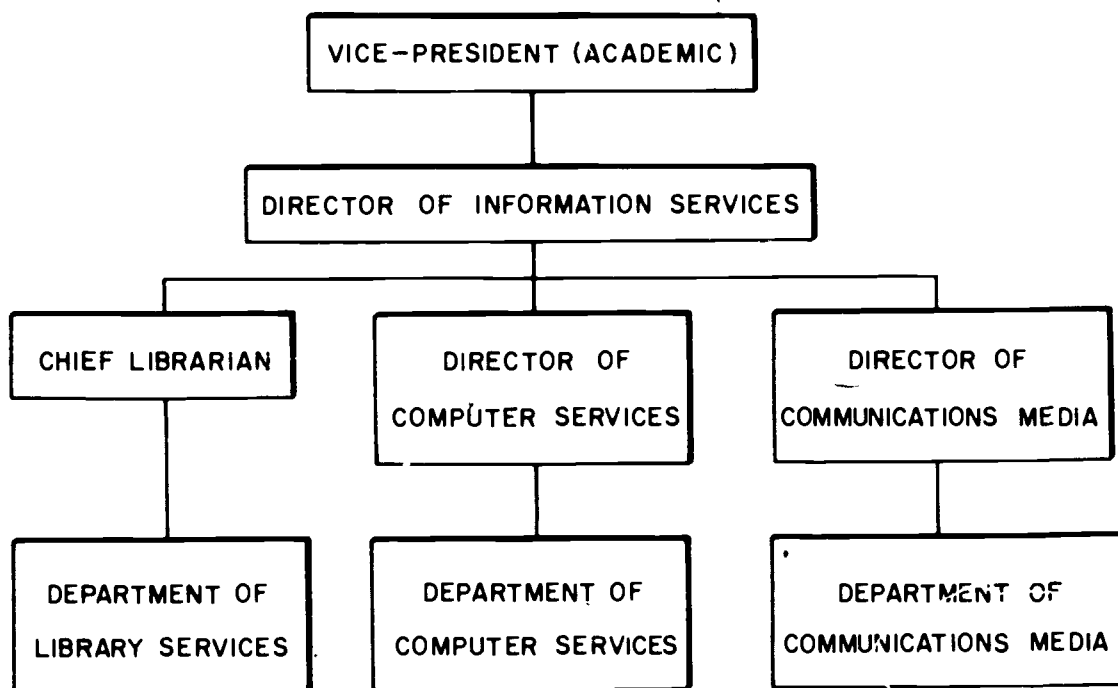
Figure 1: Administrative Structure of Information Services

```
          ┌─────────────────────────────────┐
          │     GENERAL FACULTIES  COUNCIL   │
          └─────────────────────────────────┘
```

INFORMATION SERVICES COUNCIL	DIRECTOR'S ADVISORY COMMITTEE

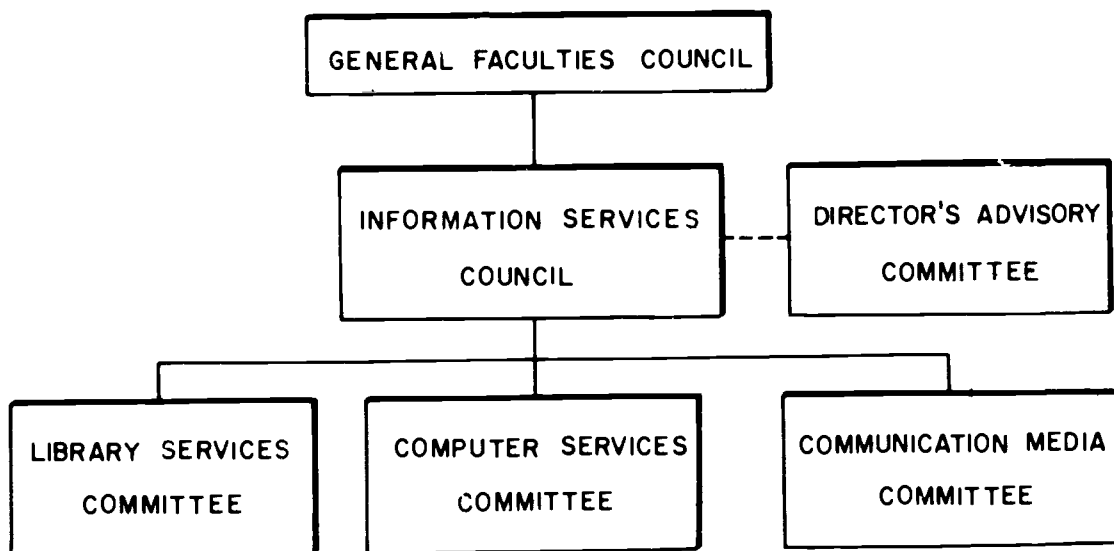| LIBRARY SERVICES COMMITTEE	COMPUTER SERVICES COMMITTEE	COMMUNICATION MEDIA COMMITTEE

Figure 2: Advisory & Policy-Making Structure for Information Services

INFORMATION SERVICES

following areas in depth: Central computing facilities, Computer-assisted learning, Integrated media, Information retrieval, Biomedical data, Computing sciences, and Administrative systems.

More than 50 persons participated as members of the Sub-committee and Task Groups in the various investigations. Interim reports prepared by the Task Groups and the Sub-committee were circulated around the campus for discussion and response.

The final report of the Sub-committee, subsequently known as the 'SIRET Report', was forwarded to the Academic Planning Committee in October, 1968. The document was a weighty one (some two inches thick) and contained recommendations both for future developments within the areas studied and for the coordination of these. In formulating these recommendations, a basic aim of the Sub-committee was "the creation of an organizational structure which would allow all groups within the information resources and educational technology area to liaise freely with each other and with external organizations, and which would coordinate their development without restricting the freedom of each to evolve within its own area". (SIRET, 1968).

The SIRET Report and subsequent recommendations were considered successively by the Academic Planning Committee, the General Faculties Council, the Academic Policy Committee, the Walker Committee (comprising those with administrative responsibilities in the information services areas), a Sub-committee of the Academic Policy Committee, the General Faculties Council Executive Committee and the Board of Governors. The recommendations which were approved in late 1970 by the General Faculties Council (GFC) and the Board of Governors were the result of two and one-half years of study, review and debate. The new organizational structure came into effect during 1971.

ORGANIZATIONAL STRUCTURE OF THE DIVISION

The document "Administrative Arrangements for Co-ordinating Certain Service Units --- " approved by the General Faculties Council and the Board (University of Calgary, 1970) stipulated that the Division of Information Services should consist, "initially of three units, namely, the Departments of Library Services, Computer Services, and Communications Media", these units being those previously known as the Library, the Data Centre, and the Audio-Visual Centre. The administrative structure of the Division was therefore as shown in Figure 1.

To complement the administrative structure there was created, "a body advisory to the Director, known as the Council of the Division of Information Services", with "each Head of the constituent service unit being advised by a Standing Committee of the Council". The relationship of the Council and its Standing Committees to the General Faculties Council is shown in Figure 2. The Information Services

INFORMATION SERVICES

Council included academic faculty from each Faculty, School and Division, representatives of the service units, and student members. Its terms of reference defined the Council as both: 'subject to the control of General Faculties Council' and 'empowered to make policy recommendations' to this' senior academic body.

The Standing Committees[+] of the Council were similarly representative of the academic and support units on campus. By their terms of reference, each Committee was to recommend policy to the Information Services Council and to act as a general advisory body to the appropriate service unit Head.

Co-ordination between the administrative and advisory structures of the Division was provided by the Director's Advisory Committee consisting of: the Director, the Heads of the three service units, the Chairman of the three Standing Committees. The terms of reference for the Director's Advisory Committee required it to be: (a) advisory to the Director on all matters related to the functioning of the Division of Information Services as an administrative unit, (b) the budget committee of the Division and (c) the executive committee of the Council. It was also to advise the Director on the best methods to be adopted for the effective operation of the Division, with particular reference to user needs.

OBJECTIVES OF THE DIVISION

As recorded in the studies and recommendations considered by the General Faculties Council in 1970, it was intended that the Division would provide:

(a) More effective administration
Previously, the Library, Data Center, and Audio Visual Center each reported directly to the Vice-President (Academic). At this time, he advised the General Faculties Council that the size and complexity of these units had become such that their effective administration was no longer possible by a Vice-President already responsible for the academic Faculties, Schools, and Divisions.

(b) Greater responsiveness to academic needs
The view that the information service units had been defining their own objectives and giving insufficient attention to user's needs was quite strongly expressed in preceding debates. The greater academic involvement in the Division was intended to remedy this.

(c) Co-ordinated development of the information services
In the earlier studies, this was seen as the most important reason for bringing the several information service units within a single organizational structure. Whilst complete integration of the services was not immediately envisaged, some at least, of the proponents of

---

[+] Also known as the 'Advisory Committees' i.e. Library Services Advisory Committee, Computer Services Advisory Committee, Communications Media Advisory Committee.

INFORMATION SERVICES

the new structure saw its establishment as a step towards an integrated
Learning Resources Division. For a short period, this view had some
institutional support as the following excerpt from the response of the
University of Calgary to the Report of the Worth Commission on Educational
Planning indicates:

> *"In the case of the University of Calgary, the Division*
> *of Information Services is in a real sense the development*
> *of a Learning Resource Unit. For convenience, the services*
> *are still compartmentalized within Departments of the Division -*
> *books, and periodicals are available from the Library, film*
> *and television services from Communications Media, and computer*
> *services from Computer Services. There has already been some*
> *inter-relationship between these units, and a regrouping of*
> *resource services may become necessary in the future. A*
> *Learning Resource Unit is typically thought of as being*
> *physically a central facility, but this need not be the*
> *best arrangement; some combination of a centralized facility*
> *with satellite service units around the campus may be a*
> *more appropriate development."* (University of Calgary, 1972)

Unfortunately, although the above reasons carried some weight, the
real reason why the Division was approved by the General Faculties
Council in 1970, despite considerable opposition, was that there were
at the time, serious operational difficulties within the information
service units. Several other remedies had failed and the proposal
for the Division surfaced at this apparently propitious occasion after
several years of Committee and Council discussion. Both proponents and
opponents of the concept found themselves able to agree that the
Division offered a possible solution to the problems then being experi-
enced by the information service units. Two years later, after the
Division had overcome these difficulties, its raison d'etre (in the view
of many faculty) had disappeared and its dissolution was being sought.
As the Chairman of the Library Committee (at the time the Division
came into being) said several years later when voting for the disbanding
of the Division, "--- certain quite specific grounds which made
the existence of the Division desirable --- perhaps no longer existed ---
so that there were no good reasons for continuing --- ". (General
Faculties Council, 1974).

DEVELOPMENT AND OPERATION OF THE DIVISION

The Division commenced operation in August, 1971, with the
appointment of a Director. Establishing the new organizational structure
proved to be particularly difficult, with considerable inertia and
opposition to be overcome. Within seven months, as a consequence of
falling university enrolments, the budget allocated to the Division had
been cut from $4.01 million to $3.81 million, requiring staff reductions
and drastic readjustment in methods of operation. These fiscal strains

INFORMATION SERVICES

were subsequently intensified by the effects of inflation. Despite the reduction in student numbers, the demand on the information service units continued to increase[+] creating additional difficulties for the new Division.

In introducing organizational change, it is well-known that strong commitment to the change is necessary at the senior administrative level. Within the first year of the Division's existence, the Vice-President (Academic) who had a clear understanding of the need for and the nature of the Division, had resigned through ill-health.

Major functional and organizational changes were found to be necessary in the units of the Division within the first year. These, together with reallocation of the available resources, prevented serious curtailment of services due to budgetary constraints. A number of staffing changes also took place during this period. The improvement of inadequate services was given a high priority and by the end of eighteen months, the worst of the problems inherited by the Division had been overcome.

In the three year history of the Division, despite budgetary restraints and continuing opposition to its existence (from within the Division as well as from without), many changes were introduced into the information services area. Some of the more important of these are listed below:

Division
Re-organization on functional basis; objectives defined – with emphasis on user needs; clarification of responsibilities – organizational charts & job descriptions; budgeting and planning on a functional basis; increased faculty involvement and responsibility – budgets and major allocations reviewed by Advisory Committees; academic representation on Tenure Committees (also on Selection Committees for senior appointments).

Library Services
Library Systems Group established; computer-based cataloguing and acquisitions system introduced; Information Retrieval Group transferred from Data Centre; collections policy developed; Subject Division hierarchies replaced by Subject Specialist groupings.

Computer Services
Reliability and stability of computer systems improved; contract for major computer facility renegotiated to include performance guarantees; fee-for-service policy implemented and developed; improved facilities and extended services introduced; additional satellite stations established around campus; participation in Provincial Computer Network Study.

[+] 1971-72 to 1972-73: Book circulation increased from 300,500 to 320,000; computer jobs increased from 341,000 to 362,000; audio-visual assignments increased from 13,300 to 15,100.

INFORMATION SERVICES

Communications Media

Extension of cable distribution system (film and video) within campus; decentralization of media-equipment distribution - based on Media Depots in major building complexes; increased film and video holdings; progressive conversion to color systems.

To illustrate the operation of the Division, two developments will be outlined. One of these illustrates a Division-Department interaction and the other a Division-2-Department interaction. Although both of these are described in relation to the administrative structure, there were also interactions with the advisory structure regarding these. Most developments involve both policy and operational management and hence both advisory and administrative structures are involved.

The first case concerns the 'acquisitions ratio' i.e. the ratio of the acquisitions budget (commonly called the 'book budget') to the total Library budget. Over the two-year period prior to the Division, this had fallen from 54.5% to 37.0%. Since a primary objective for Library Services was the development of adequate and properly selected holdings, the reversal of the decreasing acquisition ratio was set at the Divisional level as a management goal for Library Services, following Division-Department discussions. To accomplish this, a relative decrease in the salaries budget was required, with consequent readjustment in staffing. In each subsequent year, during budget preparation a 'target' acquisition ratio was set at the Divisional level and modified only if subsequent discussion, consultation, or the magnitude of the actual total allocation to the Library made this necessary. The decline in acquisitions ratio was arrested at 33.5% within two years, and by 1974-75 (the last budget in which the Division was involved) had been brought back to 35.5%, which is one of the highest in Canadian academic libraries.

The second case concerns the Information Center within the Department of Library Services. Catalogues, indices, and other reference material for the various print media (monographs, journals, serials, etc.) were already available in the Information Center, at the time the Division was created. The Public Card Catalogue, adjacent to the Information Center, was restricted to print materials. Considerable information on films, videotapes, and similar media was held by the Department of Communications Media, but only a limited reference service could be provided. A periodically-revised catalogue of film holdings on campus, however, was provided by this Department. Following a series of meetings between the Departments of Library Services and Communications Media under Divisional auspices, it was agreed that the Information Center would become the *primary center* for information about *all media*. Increasing emphasis would be given to catalogues and indices for the non-print area. Moreover, it was agreed that all film and videotape holdings on campus would be catalogued by Library Services and interfiled within the Public Card Catalogue. Access to films and videotapes would be provided in the Library through television monitors in the Undergraduate

INFORMATION SERVICES

Reading Room, using transmission from the Communications Media telecine
facility. This service was subsequently introduced (in color) on an
at-request basis, available to any user whether faculty or student, and
has proven most successful.

THE DISBANDING OF THE DIVISION

By late 1973, the view was becoming prevalent on campus that
since the major difficulties in the information service units had been
resolved there was no need for the University to carry any longer the
administrative costs of the Division. Allegations were being raised that
the system was no longer subject to 'academic control'. The view that
the Library had been 'downgraded' by being incorporated within the
Division, had begun to surface again. The Library, it was being said
no longer had the status of 'the heart of the University'. The Chief
Librarian (appointed shortly after the creation of the Division) had
made known his belief that the Library should once again be established
as an independent entity.

The result of these pressures was the establishment by the
General Faculties Council in February, 1974, of a Committee "to examine
the concept of a Division of Information Services, to assess its validity
and to make recommendations as to whether the concept should be maintained,
modified, or eliminated; to determine whether problems relating to the
Division stem from causes other than the concept itself and if so, to
recommend to General Faculties Council on the remedies to be applied".
(General Faculties Council, 82, 1974)

The Review Committee report was presented to the General Faculties
Council in May, 1974 and the following are exerpted from this report:

> " --- the single most important cause of problems is the
> fact that the 'faculty model' has not proven to be a suitable
> one. The three departments simply do not relate to each
> other in the same way that teaching departments do in an
> academic faculty. They have different orientations, different
> needs, different stresses and each relates to the academic
> community in a different way. In spite of the attempts by
> the Director to effect co-ordination, it simply has not
> materialised. This has meant that, among other things,
> the Division's Council has not been effective and as a
> consequence the Division's relationship with the rest of the
> University is other than that which was envisioned when it
> was established."

> "When a unit such as the Division of Information Services
> encounters difficulties in a university there is a tendency
> to blame the senior administrators in that unit. In the
> opinion of the committee, it would be an injustice to do so
> in this case. The Director and senior staff of the departments
> have worked hard to get the Division operating successfully.

INFORMATION SERVICES

They should be commended for their efforts, not criticized.
If criticism is to be directed anywhere it should be towards
the General Faculties Council which approved the original
design of the Division."

"It is recommended that the Division of Information Services
be dismantled --- "

At the May meeting of the General Faculties Council when the Review Report
was considered, apart from the support of the Committee members, the
predominant weight of the debate was unfavourable to the Report recommenda-
tions. The (academic) Chairmen of the three Standing Committees of
the Division were opposed to the recommendation that the Division be
disbanded. The matter was tabled over the summer until the September,
1974 meeting of the General Faculties Council when a motion to disband
the Division was approved by an overwhelming majority on the recommendation
of GFC's Executive Committee.

CONCLUDING EVALUATION

What can be learnt from the short history of the Division of
Information Services at the University of Calgary? Only a limited amount,
since it was disbanded soon after the major problems it was initially
beset with had been overcome, and before there was sufficient opportunity
to evolve. Nonetheless, based on the experience of the Division during
its brief existence, the following are put forward as guidelines for
any future venture in the co-ordination of academic information services:

1. There must be a strong institutional commitment to the co-ordinating
organization, either from the academic community or from the governing
authority, but preferably from both.

2. Bringing the information service units together within a co-ordinating
organization can lead to improved administration and increased academic
involvement, with benefits in both efficiency and effectiveness.

3. The co-ordination must be at the level of a Vice-President for Information
Services or similar, since this is the level at which co-ordination is
primarily needed. Moreover, co-ordination at this level avoids any
'downgrading' in status of the information service units with the consequent
resentment and opposition this would bring.

4. A Council for Information Services, if adopted, must be given *policy-*
making powers not simply *advisory functions,* or otherwise it will be
regarded as redundant or inherently ineffectual.

5. The support of the Heads of the Information Service units within the
new structure is essential if the co-ordination is to be effective. The
venture can be crippled by one Head trying to bring about a reversion
to the traditional pattern of independent units.

REFERENCES

GENERAL FACULTIES COUNCIL, 1974 Minutes of the 72nd Meeting of the General
Faculties Council. University of Calgary, February, 1974.

GENERAL FACULTIES COUNCIL, 1974 Minutes of the 90th Meeting of the General
Faculties Council. University of Calgary, September, 1974.

GENERAL FACULTIES COUNCIL, 1974 Report of the Review Committee on the
Division of Information Services. General Faculties Council University
of Calgary, May, 1974.

HOWARD, H.A., 1974 Administrative Integration of Information Resources
and Services in Universities in Canada and the United States. Report to
Council on Library Resources, September, 1974.

INFORMATION, 1972 Columbia U Establishes Post for VP for Information
Services. Information Pt. 1, p. 72, March-April, 1972.

SIRET, 1968 Report of Sub-committee on Information Resources and Educational
Technology (SIRET). University of Calgary, October, 1968.

UNIVERSITY OF CALGARY, 1970 Administrative Arrangements for Co-ordinating
Certain Service Units at the University of Calgary. General Faculties
Council and the Board of Governors, University of Calgary, October, 1970.

UNIVERSITY OF CALGARY, 1972 Response to the Report of the Worth Commission
of Educational Planning. University of Calgary, October, 1972.

VEANER, A.B., 1974 Institutional Political and Fiscal Factors in the
Development of Library Automation, 1967-71. Journal of Library
Automation, 7 (1): 5-26. March, 1974.

(The author was Director of Information Services at the University of Calgary,
from 1971 to 1974.)