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ABSTRACT

Points stressed in this paper are: (1) Librarians can only function as professionals within an institution; (2) Every institutional organization's operation can only be understood within a social context; (3) Academic resource libraries are under stress, both financially and functionally, which is expressed by many as a need for innovation; (4) Wayne State University has an administrative and managerial structure that has operated well in the past three decades; (5) Change in organizational structure requires a transfer of information among specialists; (6) There are barriers to communication which arise from organizational structure and from specialized functions; (7) To effect changes in an organization certain kinds of information transfer are necessary and social scientists have been able to generalize these processes to the point where individuals outside an organization, using these generalized concepts, can cause change to take place within an organization; (8) Within every organization, specialists arrange themselves within certain roles to protect the functioning of the organization; and (9) Although changes can be brought about through the use of knowledge of the specialists within an organization, management techniques for gathering information and effecting change have been developed which are directly applicable to libraries. (Related papers are available as LI 003179, 003180 and 003181) (Author)

WAYNE STATE UNIVERSITY
University Libraries

Working Paper No. 1

Library System Development
And Programming for Change

June 25, 1971

Every organization gains its identity because of its purposes or its objectives. The organization is judged by society on whether these objectives are useful. More directly, an organization survives because individual human needs are fulfilled. Not infrequently an organization continues even though it no longer produces "satisfaction" for the constituency for which it was created. Such an organization justifies its existence by expounding that the organization is an end in itself which usually gets expressed in a flurry of activity by the members of the organization. They expend a great deal of energy in self-aggrandizement by devising means to convince themselves that change is detrimental.

This bleak picture of a self-perpetuating bureaucracy is extreme, however. A large organization requires that there exist

- (i) a group of individuals applying specialized knowledge or using specialized skills,
- (ii) a system of rules so that the output of the specialists gets related to accomplishing the objectives of the organization,
- (iii) a hierarchy of authority (a) to insure the stability of work environments and (b) to provide a mechanism for communicating with other organizations and society, and
- (iv) a degree of impersonality of attitudes to permit the organization to gain its identity separate from any one, or group of individuals, within the organization. (1)

This view of an organization or agency reveals a dichotomy. While society (or rather, the recipients of services or products) judges whether an organization is useful or not, society has

(1) Blau, P.M. Bureaucracy in a Modern Society. Random House, 1956.

no way to judge whether the provision of services is accomplished efficaciously. Only those inside the organization have the competence to make judgments about (i) whether the individuals within the organization are efficiently deployed and (ii) whether the resources and facilities are utilized maximally.

Management of University Libraries

No organization in our modern society is self-contained; either it overlaps with other organizations or is subsumed functionally or operationally within some other organization. Extending this view, society as a whole is a system. The activities of one organization affects the functioning of others. Since an organization is identifiable through its objectives, any sub-organization is therefore involved with the objectives of a parent organization. Specifically, if a university's objectives and program development is unclear, then its library organization will also be viewed as confused. Similarly, if the objectives of the library system as a whole are undefined and diffuse, then the separate units within the library system suffer misdirection of effort. Individuals assigned to library units working under this kind of situation can, and often do, feel as if they are merely a part of a bureaucratic machine and have little contribution to make. If any change is to be brought about in this organization by a single individual we cannot understand this librarian's "difficulties" without considering the whole social context which includes

- (i) the same individual's activities over a period of time,
- (ii) the activities of other librarians toward the change in (a) the same unit, (b) the library system as a whole, as well as (c) other libraries,
- (iii) the library system's past and present efforts at initiating changes,
- (iv) the library system's history of encouragement for innovation and change,
- (v) the current state of the development of libraries locally as well as nationally,
- (vi) the current, local and even national mood with regard to change in libraries, and their parent institutions, and
- (vii) the specific efforts to bring about change in library activities through professional and governmental action.

Stated this way, the mind boggles with the complexities involved in making even minor changes in any large interlocking organization.

There are few areas in our society that are not under organizational stress because of demands for change. The questioning of the objectives and priorities of our organizations is so widespread that Reich postulates a whole new type of consciousness existing in our society that can be characterized as a desire to escape any imposed system and declaring that immediate experience to be the most precious of all commodities.(2) Higher educational institutions throughout the country are often responding with a finger-in-the-dyke method of dealing with crisis situations. Although Wayne State University has not had to deal with as violent changes as many other universities, we cannot be identified as having yet found a direction and purpose, if Keast's report to the faculty is any picture of reality -- at best we have identified a few possible ideas on which to define objectives.

Within the past two years the number of articles in library literature which portend the veritable collapse of our nation's academic libraries has increased.(3) The two methods which were assumed in the 60's would solve university library problems appear to be neither innovative nor adequate: (i) more money, and (ii) automation. Librarians have been aware of developing difficulties, not only quantitative, but qualitative in the operation of university libraries. The Association for Research Libraries has taken the position that large libraries must undergo changes in management practices.(4) Libraries have become so complex they can no longer be viewed as a mere administrative unit of a larger organization, the university. There is a distinction to be made between administering an organization and managing an organization. Administering implies authority limited to a responsibility of accomplishing specified objectives with a given staff and facilities. Management includes the planning and determination of objectives and requirements for an organization. Management identifies that which is to be administered, but more important, has the responsibility to articulate the role of the organization not only for itself but for the entire community with which it does, or ought to, relate.

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- (2) Reich, C.A. *The Greening of America*. Random House, 1970.
 - (3) Mason, E. Along the academic way. Library Journal 96:1671-76, May 15, 1971.
 - (4) Boaz, Allen, and Hamilton. *Problems in University Library Management*. ARL 1970.

Responding to, and Need for, Change in WSU Library System

The WSU library system concentrated on collection development for the past 30 years. (Working Paper 2 will deal with additional objectives for the WSU library system.) The accolade to the accomplishment of this objective is that WSU was recently admitted to the select group of libraries to be a member of the Association for Research Libraries. The current organization of the WSU library system reflects this concentration of effort. A divisional and departmental structure was used to carry out library services and developmental objectives which were further formalized with the move into the present General and Kresge Library in 1952. Circulation service was decentralized among these public service divisions. The technical service departments, Acquisitions and Cataloging, functionally identifiable as requiring specialized talents, were retained. This organizational mix of function and subject matter, a common post-World War II pattern for medium sized University Libraries, has worked well and has been hospitable to considerable expansion. New divisions were accepted or created, Medicine, Labor History Archives, Folklore Archives; further divisional specialization could develop, e.g., music, urban studies, maps. As the library grew, further departmental specialization could be effected, e.g., separation of serials and monograph acquisitions. Different intellectual systems and methods could be incorporated into the organization, e.g., change to the Library of Congress classification system.

Spatial relationships do affect the functioning of an organization. During the past five years three new libraries were built, two of which are free standing buildings; the collections housed in these units are each larger than the whole University's library collection was 35 years ago. Although there are new buildings, the operational plan of the library system has remained essentially unchanged. What should be recognized is that the current organization has had two decades to establish lines of authority and responsibility. A bureaucracy's strength is its capacity to manage efficiently that which is routine and predictable. Organizationally, this is effected through a division of work controlled by a system of procedures and rules designed to deal with all contingencies relating to work activities. A bureaucracy of this kind results in an impersonality in human relations; an internal boundary system prevents the transfer of responsibilities across these boundaries, or even, administratively the transfer of information. The tone of these statements may sound critical: What should be emphasized is that this situation is a natural and expected evolutionary development that has proven effective

and needs no apology or justification -- the library system itself is tangible evidence that demonstrates accomplishment through the work of dedicated, competent individuals.

The underlying assumption of this paper is that most of our social agencies are undergoing changes necessitating the defining of new priorities which affects individuals' and institutions' functions. These outside pressures which include university limitations on space utilization and funds require a rationalization of the existing library operations. If the perspective presented here has any validity, then it would appear that there are two extreme alternatives.

1. If the library wishes to maintain its present bureaucratic integrity, then it must find a method to continue to incorporate new procedures and rules into its organization with the realization that operational complexity will increase.
2. Utilizing the awareness of the staff for a need for change, create a mechanism to permit the development of a different organization -- change the environment in which the library staff work.

If the first is the more suitable alternative, the library system still has the responsibility to justify its program which will require the introduction of additional management techniques -- as an ARL library, we cannot remain administratively and technologically stagnant. If the second alternative is more suitable, then the same approach must be used as a change agent to produce a climate for attitude development that encourages (i) learning of ways of collaboration, (ii) identifying authority and responsibility patterns, (iii) the formation of new or different procedures and responsibilities, and (iv) relating the new procedures to people.

What is proposed here is a suggestion for action in two areas:

- (i) the use of established methods to increase the flow of information so that the competences of the library staff can become recognized and utilized for planning and implementation for a different library organization,
- (ii) the application of management methods and practices that are not now in general use in the WSU library, or, in fact, in most ARL libraries, but which are established techniques recommended for library application.(5)

(5) Hayes, R. and Becker, J. Handbook of Data Processing for Libraries. Wiley, 1970.

Communication for Innovation

Whether the University library system is to change its organization or attempt to justify the existing one, information and data must be collected, analyzed, and then synthesized in some way before rational decisions can be made. A literature has developed in the past decade about the utilization of information and knowledge to initiate change. The perspective presented here is derived mainly from Havelock. (6) In a problem solving situation or in a situation where change is to be brought about Havelock starts out with an obvious classification about knowledge utilization: there has to be a transfer of information through various media between a sender which can be a resource person, a resource social system or organization and a receiver who is the consumer or user of the information. There are conditions which can inhibit or facilitate this transfer of information. Knowledge utilization can be seen as

...a series of two-way interaction processes which connect user systems with various resource systems including basic and applied research, development, and practice. Senders and receivers can achieve successful linkage only if they exchange messages in a two-way interaction and continuously make the effort to simulate each other's problem solving behavior. Hence, the resource systems must appreciate the user's internal problem solving patterns, and the user, in turn must be able to appreciate the invention, solution formulation and evaluation processes of the resource systems. This type of collaborative interaction will not only make solutions more relevant and effective but will build relationships of trust, mutual perceptions by user and resource persons that the other is truly concerned, will listen, and will be able to provide useful information. These trust relations over time can become channels for the rapid, effective, and efficient transfer of information. Effective knowledge utilization also requires a degree of division of labor, coordination and collaboration throughout the social system. (7)

(6) Havelock, R.G., et al. Planning for innovation. Ann Arbor, Institute for Social Research, 1971.

(7) Ibid.

Some of us may not accept the argument that the library system is a bureaucracy that has defined functions which prevents us from sharing knowledge to bring about change. Numerous examples can be found by those who defend the present organization that change is taking place as rapidly as need be. However, it is assumed that there are some of us who would at least like to explore the possibilities of changing the basic structure of the library rather than merely adding functions and procedures on an organization begun well over 20 years ago. Perhaps this can be best demonstrated through the use of an example.

Within the University libraries there are seven circulation "departments" or systems. Let us say an individual in charge of one of these circulation systems, Dave by name, wishes to change the rules and procedures and hopefully to improve his way of doing things by reaching out for something new. As long as his attempt to innovate is confined to file arrangements, that is, no new forms developed, he would only have to engage in demonstrating the efficacy of of his methods to those in his own divisional unit. Perhaps under the present hierarchical administrative arrangement even new forms could be designed and supplied, but this involves another "level" within the organization and the innovative idea is stopped from being tested because the administrative hierarchy finds some (to Dave) unexplainable reasons for not getting the new forms.

To use another hypothetical example, Dave decides that if there were a change in policy, not only would the library patron (of his division) be better served, but the circulation file control would be improved. A change of policy (if permitted) would result in library patrons having to adjust to a different set of policies as he moves from division to division. This in turn might cause conflicts that could produce charges of incompetence and irresponsibility not only to Dave, but to individuals in other divisions. Faced with this possibility Dave has three alternatives.

1. He can proceed to try to "sell" his idea for change of policy to six other circulation chiefs; few of us would have the strength to attempt such a selling job, but more important, it would take his time as well as that of the six other circulation chiefs who could rightly resent this interference; Dave could easily be labelled as an interfering and insensitive person -- one who does not understand the uniqueness of each division's purpose nor the complexities and realities of circulation methods; who wants to place himself in such a vulnerable position?

2. He can go to the University Librarian and sell his idea; the University Librarian is then expected to judge the consequences of the proposed change to the six other circulation departments; to make a decision he would have to have the same knowledge about all units as would be required under alternative 1; certainly the University Librarian in his position of authority can acquire the knowledge more rapidly, but the point must be emphasized that transferring responsibility for synthesizing information does not remove the need to have the information in the first place.
3. He can admit that innovation is too costly in personal time and energy to warrant the effort to effect it and abandon the whole idea.

This story could be made even hairier if Dave comes to the conclusion that the library system would be better served if two or more of the circulation units were combined. Such an innovation begins to challenge job securities and the whole organization of the library system.

What must be recognized is that any but very minor changes can and do affect the library organization as a whole and challenges the functioning of individuals in what he sees as his job. To effect a change obviously individuals have to be involved. To return to Havelock's categorization used above, Dave is a user of information which he must acquire from resource persons. The objective is to try to get the two so that they learn from each other so that they form a single system and become themselves a resource system. This sociological lingo is merely saying that to problem solve there must be collaboration, however, there are many barriers which work against this kind of collaboration within a library organization. Among these, again using Havelock's perspective, four are worth generalizing.

1. Role Perception and Definition:

To be able to act as either a "resource person" or a "user", an individual must be able to perceive himself as filling a "resource" or "user" role, and he must be able to define his role in these terms. Many individuals may be unwilling or unable to think of themselves either as "resource person" or as "user". To admit to the need for outside resources is sometimes unacceptable for some, and conversely, to identify oneself as a "resource" or "helper" (one who gives service) is unacceptable for others.

2. Status Discrepancy and Ambiguity:

A person may also feel that acting in one or the other of the roles of sender and receiver will endanger his status, particularly if he notes a status discrepancy between himself and the other person, or if his status relative to the other person is ambiguous.

3. Language:

We may also find that sender and receiver do not speak the same language, literally or figuratively. For example, the sender's words may be excessively technical or loaded with jargon and private meaning.

4. Being Out of Phase:

We may also find that the sender and receiver are simply out of phase; the sender may be giving a solution before the receiver has articulated his problem, or the sender may not be prepared to offer a solution when the receiver is asking for one.

All of these examples suggest that the user and the resource person are each enclosed in a very thick shell made up of numerous interpersonal barriers.... Personal identity and self image (e.g., not wanting to be seen as in need of outside help) represent one type of barrier. Discrepant values (e.g., on such things as giving 'service' and 'self-help') represent another. Status differences represent yet a third type of barrier, and language, space and time are others.(8)

To deny that there are barriers to information transfer in the WSU library system may be a mechanism to "prove" professional identity. The personal accountability of the individual practitioner can be buried effectively in endless rounds of buck passing, e.g., "It is not my responsibility", "I do not have the authority to make such a decision". There is a condition about the librarian practitioner that cannot be avoided: a librarian can only function if he is a member of an organization. A librarian to succeed must on the one hand have an organization in which to practice his art to which he must suborn his individuality, but on the other hand he must demonstrate a personal accountability to his peers and the consumer of his service. Whether a librarian in the WSU library is prevented

(8) Ibid.

from being a professional because of poor information transfer in problem solving or whether professionalism could be enhanced by a better communication mechanism can only be determined if an attempt is made to encourage and to improve conditions for collaboration.

Organizations have obviously changed, or "reorganized", themselves throughout history. Only in the last 30 years has there been attempts to create generalization about how re-organization takes place. The one generalization that can be made is that something new must be "injected" into an organization to cause change. Certainly it is possible under certain conditions and at certain times to bring together individuals of different sub-groups within an organization to discuss barrier problems and to form personal relationships which then result in more effective resource and user roles. In fact, social scientists have created a profession of being "change agents" in which groups are brought together with the purpose of initiating information transfer among individuals with the expectation that sufficient collaborative spirit can be engendered to cause "innovation". The professional change agents generally group themselves around four general ways of operating.

1. The conveyor is the most rudimentary and simplistic change agent. He merely acts as a carrier, one who takes knowledge from expert sources and passes it on to non-expert potential users. The "knowledge", of course, could be in the form of research data, information derived from research, "packaged" knowledge derived generally from scientific knowledge in the form of curricula, printed materials, and training programs, or it could be supplies, products, services, or practices founded on or derived from scientific knowledge in one way or another.

2. The consultant is a facilitator, helper, objective observer, and specialist in how to diagnose needs, how to identify resources, and how to retrieve from expert sources. He tells "how" in contrast to the conveyor, who tells "what". The underlying rationale for consultation is that only the client, himself (the user), can determine what is really useful for him. Therefore, when others come to his aid they should do so as collaborators or encouragers. It is up to the consultee to take initiative and when information is given, he is in a position to take it or leave it.

3. The trainer works on the assumption that underlies much of formal education, namely that a body of knowledge can be conveyed and stored for future use in an extended or intensive learning experience. The trainer is an expert who is capable of conveying large quantities of knowledge and/or

complex skills. In contrast to the "conveyer" he tries to inculcate new knowledge prior to the time the practitioner enters the work setting. (9)

4. The communication specialists apply various techniques to cause individuals to act on their own to solve problems individually or as a group. Sunday supplements frequently carry stories about these techniques in various settings. Sensitivity training and forced field analysis are two such techniques.

We need only examine what occurs around us almost daily to realize that we are all involved with innovation in some way or another. The techniques are familiar and we have all been affected by them.

1. The working or position paper, while not in the same category as other change agents and certainly not a technique commonly used in the library system, it is put first on the list merely to emphasize that this paper is itself a technique to cause information transfer about information transfer. The working paper is not meant to be a final document -- it is to serve as a base upon which discussion can begin.

2. The leader, or the boss, real or assumed, states for whatever reason he may have that henceforth new policies, procedures, attitudes, etc., will prevail. For this kind of hierarchical authority pattern to function requires that the leader have a capacity for synthesis and an ability to anticipate difficulties.

3. We know that not all change is good, and not all resistance is misguided and perverse. On the contrary, it may be that all new ideas and changes bring with them some problems and some reasons why adoption is not advisable. It is partly for this reason organizations require barriers, checks and balances. The role of the defender is to sensitize a group to the pitfalls of innovations and to mobilize opinion and to demand an adequate justification be supplied if applications of new knowledge or techniques are to be initiated.

(9) Considerable study has been undertaken on the effect of training on the development of an organization. What is clear is that even though an administrator may generously release time for his middle and lower levels of staff to undertake additional training, without himself doing so, frustration will occur. Unless the top can be influenced by new values, changes made at the middle or lower levels could create even greater problems and at best remain incapsulated in the particular unit. Cf. Argyris, C. *Interpersonal Competence and Organization Effectiveness*. Richard D. Irwin and the Dorsey Press, 1962, p. 281.

4. The innovator, who is most often identified in a stable group as a trouble maker, is the first person in an organization to take up a new idea. His role is opposite that of the defender even though he uses the same methods to accomplish his ends.

5. The consumer of a service acts as agent for change. A few years ago the most powerful of the consumers of library services in the university was the faculty. The power may well now have moved to the students, or rather a small group of students.

6. The practitioner, in our case the library staff, are themselves change agents. Ad hoc committees are formed, or we organize ourselves in different ways from the description given on an administrative chart. There would be no reason to form ourselves into such groups unless our objective was to cause change.

This section of the working paper has tried to emphasize that stability cannot be maintained or changes effected without some transfer of information. However, we all know, and social scientists keep confirming what we know, that stability and change must have administrative sanction. A committee produces the camel rather than the horse. Without an authority structure, no organization (even a university) can survive. The WSU library system does have an authority structure. The question which we must ask and answer is after collaboration through information transfer do we have an authority structure which can insure an effectuation of what needs to be done.

Another important assumption underlying this paper is that the library staff as a group of practitioners have collectively the competence to act as change agents by calling upon our innovators, defenders, leaders (recognized and unrecognized) to reconstruct our library system so that it is a defensible organization to ourselves and to those who consume our services.

Management methods and practices

To repeat a statement made earlier, whether the library system is to change or to stabilize its present organization, information and data must be collected, analyzed and synthesized before decisions can be made. "Scientific management", a concept derived in 1910, has developed many techniques. Hayes and Becker devote almost two-thirds of their Handbook of Data Processing for Libraries to explaining these techniques. Their argument is that automation techniques and machines should be

used in a library only if it is well organized and operating efficiently. Interestingly, all the techniques described by Hayes and Becker have been used somewhere in the library system in the past five years. We have, therefore, knowledgeable individuals who already have experience and if need be, can act as trainers. Since Hayes and Becker have described these techniques well, there is no justification to summarize their work here in a few pages; however, to give names to some of these techniques:

1. Program budgeting. The procedure is simply a matter of taking the budget (or expenditures) which is usually listed in such categories as wages, supplies, travel, etc. and rearranging the dollar amounts into functional categories. For example, how much of the budget is used for salaries to support, say, reference services, circulation procedures, selecting books, administration, etc. The first time this is done, it seems to those engaged in the task to be tedious and confusing to fill in spaces in form with numbers which are arrived at through guess work and dubious estimations. Once done, however, it is a powerful tool for making comparisons between units and between budget periods. The library system will undoubtedly have to use this management method whether it wants to or not within the coming year because the University will be changing its entire budgetary procedures so that all departments will be submitting program budgets.

2. Systems analysis. This method of describing decision points in a work flow has, of course, received new stature as a technique with very standardized methods with the advent of automation. As a technique, however, it was developed long before computers -- in fact, many of us learned the technique when we diagrammed sentences in studying grammar.

3. Program evaluation and review technique (PERT)
PERT is a formalized method to record a plan of action involving changes which are to be accomplished within a specified time. It serves as a basis for monitoring and altering, if necessary, plans as well as being a method for anticipating consequences of change. PERT, as a technique, was used if not in its most rigorous sense, at least four times during the past year by four different library units. Four library units moved wholly or in part. A plan had to be devised, a schedule made, and the work carried out. We certainly have the knowledge to use the technique.

Summary

No apology is made for the rhetoric of the previous pages. The conditions which prompted the writing of this working paper are not neatly defined and simply placed in on hierarchical arrangement. Although a logical presentation might be possible, the purpose of the paper is to invite discussion on possible alternative directions for action rather than to suggest "what is wrong" and how errors can be corrected. These many pages can be reduced to a few statements.

1. Librarians can only function as professionals within an institution.
2. Every institutional organization's operation can only be understood within a social context.
3. Academic resource libraries are under stress, both financially and functionally, which is expressed by many as a need for innovation.
4. WSU has an administrative and managerial structure that has operated well in the past three decades.
5. Change in organizational structure requires a transfer of information among specialists.
6. There are barriers to communication which arise from organizational structure and from specialized functions.
7. To effect changes in an organization certain kinds of information transfer are necessary and social scientists have been able to generalize these processes to the point where individuals outside an organization, using these generalized concepts, can cause change to take place within an organization.
8. Within every organization, specialists arrange themselves within certain roles to protect the functioning of the organization.
9. Although changes can be brought about through the use of knowledge of the specialists within an organization, management techniques for gathering information and effecting change have been developed which are directly applicable to libraries.