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# Audit of Internal Communication Practices Among Special Education Personnel in the Virginia Department of Education

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# AUDIT OF INTERNAL COMMUNICATION PRACTICES

# AMONG SPECIAL EDUCATION PERSONNEL

# IN THE VIRGINIA DEPARTMENT OF EDUCATION

## Project 91-99

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## Executive Summary

## THE STUDY

The overall goal of this study was to provide recommendations and a mechanism to assist the DOE in providing proper communication of issues and coordination of activities involving the provision of services for children with disabilities. The research team employed a case study approach centered around a modified communications audit.

The study addressed the following three questions: 1) What is the current communication and coordination system for internal personnel involved with special education issues? 2) What are the strengths,weaknesses and barriers to use of the system? 3) What recommendations can be offered to improve internal communications and coordination among special education personnel? The major findings and recommendations are highlighted below. A more detailed accounting of strengths, barriers and weaknesses in the components of the system is found in the report.

## KEY FINDINGS

**Description of the Current Internal Communication System**

Interviewees felt there was inadequate communication among Special Education personnel across departments.

Many special educators expressed the feeling of isolation which was made more difficult by the lack of a) a clear statement of the role of special education its priorities, b) an accurate and up-to-date organizational chart reflecting their membership and the absence of several of the many rituals that serve to solidify a team, c) an accurate personnel list by expertise, regular and efficient communications, d) timely information flow on staff meetings, anticipated work tasks and impending deadlines, and e) regular consultation on policy at all levels of special educators.

**Assessment of the Current Internal Communication System**

The greatest strength of the current communication system are the staff assigned to special education and plethora of technical devices by which staff can communicate; LAN, voice mail etc..

The greatest barriers and weaknesses of the system are: 1) poor information management, 2) inconsistent channel use, 3) inappropriate levels of information sharing as opposed to actual communication needs, 4) the skill level of the personnel in operating the existing communication channels, 5) an ambiguous environment where no one seems in charge of overall special education operations, and 6) the absence of a unit-wide policy on communication.

## KEY RECOMMENDATIONS

**Primary Recommendations:** The following recommendations should be implemented immediately.

1. A MEETING OF ALL SPECIAL EDUCATION PERSONNEL SHOULD BE HELD ONCE A MONTH ON A REGULARLY SCHEDULED BASIS.

2. THE PERSONNEL CHART BE RECONFIGURED TO IDENTIFY SPECIAL EDUCATION PERSONNEL.

3. A SIGNIFICANT EFFORT MUST BE TAKEN TO EVALUATE THE INTEGRATION OF THE PROFESSIONAL SUPPORT STAFF INTO THE DAY TO DAY OPERATIONS.

4. THE DOE SHOULD CONTRACT WITH A PROFESSIONAL DATA BASE MANAGER TO DESIGN A SYSTEM TO FIT USER NEEDS.

5. A LIST OF ALL SPECIAL EDUCATION PERSONNEL SHOULD BE COMPILED AND MAINTAINED WITH A NOTICE OF THEIR SPECIFIC AREAS OF EXPERTISE.

6. IMPORTANT INTERNAL COMMUNICATION SHOULD BE TRANSMITTED BY LAN FOLLOWED BY MEMORANDUM AND IN SOME CASES VOICE MAIL.

7. ALL WRITTEN SPECIAL EDUCATION INFORMATION COMING INTO THE DOE SHOULD BE SENT TO THE LEAD SPECIALIST FOR DISTRIBUTION.

8. THE TEAM CONCEPT OF THE ORGANIZATION SHOULD BE SUFFICIENTLY SUPPORTED WITH STAFF DEVELOPMENT OPPORTUNITIES IN USE OF THE VARIOUS COMMUNICATION CHANNELS, AND SOFTWARE FOR PROJECT AND TIMELINE MANAGEMENT.

## Enabling Recommendations

THE MANAGEMENT TEAM SHOULD ENDORSE AND ACTIVELY PROMOTE THE CREATION OF A COMMUNICATION TASK FORCE TO STUDY THE ONGOING COMMUNICATION NEEDS OF SPECIAL EDUCATION STAFF AND WHOSE WORKPLAN MAY SERVE AS A MODEL FOR STUDIES OF OTHER UNITS.

The Communication Task Force should draft a **communication policy** for special education personnel that would:  a) ensure orderly communications through out the organization and would keep departments functioning smoothly and on schedule; b) prevent redundancy and overlap of staff responsibilities; c) allow for complete answers from the source most qualified to provide the answers.

# Table of Contents

# Preface

The Virginia Department of Education (DOE) is the State agency which conducts administrative, supervisory, and assistance activities to support public elementary and secondary education in the Commonwealth. The DOE assists the Governor's office, the State Board of Education, and the General Assembly in meeting their policy objectives and the State's constitutional requirements. The Superintendent of Public Instruction functions as the agency head of the department.

In September of 1990, the Superintendent of Public Instruction presented a major plan to reorganize the department from a traditional hierarchical organization to a modified matrix organization. The scope of the DOE reorganization was without recent precedent in Virginia state government.

The Department completed its reorganization in March 1991. The reorganization continues to affect organizational processes. For example, two studies, the JLARC review and an Internal Audit, conducted to monitor the implementation of the reorganization indicate that the reorganization process has interrupted the traditional flow of communications in the organization and with its constituencies.

A further complication is the reorganization of the State Department of Education itself from a traditional hierarchical organization to a matrix organization. Special education resource personnel were assigned across several divisions, further compounding an already complex set of activities, operational and program requirements involved with the provision of services for students with disabilities in Virginia.

These concerns are appropriate when one considers that special education programs across the state of Virginia operate under major federal and state compliance documents that have resulted in programs for students with disabilities being the most regulated aspect of the Virginia and the American educational systems.

Recognizing these concerns, the Superintendent of Public Instruction requested that the DOE prepare a comprehensive strategic plan for Special Education. As a part of the development of the overall plan, DOE retained John Pisapia and Evelyn A. Jez of Virginia Commonwealth University to conduct an evaluation of its internal communication systems for special education and make recommendations for improvements.

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## THE STUDY

The overall goal of this study is to provide the DOE with recommendations to assist in providing proper coordination of issues and activities involving the education of students with disabilities so timelines are addressed on schedule with neither service nor funding interrupted. The rationale for the study is that the Virginia Department of Education's reorganization has interrupted the traditional flow of communication in the organization. In addition, members of the agency assigned to special education have been diffused throughout the organization across several divisions, thus making coordination of efforts and activities and information sharing difficult.

This audit focuses on the mechanism and activities needed to make internal communications work for special education personnel in the new organization. In a centralized, traditional model, communication is simple and follows a pre-determined pattern--a communication network. In the centralized model, communication flows from member to member. In decentralized organizations, all members are able to communicate with one another equally. Studies show that centralized networks are more effective in solving simple problems, while decentralized networks are more effective with complex problems.

In general, communication in organizations takes place on the formal and informal levels. Informal communication networks indicate how organizations operate. Sociograms show actual communication networks. But in the formal network, information overload, distortion and omission of information are serious organizational communication problems that have to be addressed. The use of support staff to serve as gatekeepers to filter and que information can help relieve overload. Distortion and omission can be reduced by

verifying messages and bypassing nonessential parties. Improvements in work environments such as open-space offices and substantial attention to the information gathering and processing decisions can also facilitate the communication process.

Therefore, the purpose of this study is to formatively evaluate the formal and informal internal communication processes of special education personnel in the Virginia Department of Education. Specifically the study addressed the following questions:
1) What is the current communication and coordination system for all internal personnel involved with special education issues? 2) What are the strengths, weaknesses and barriers to use of the current communications system? and 3) What recommendations can be offered to improve internal communications among special education personnel?

## METHODOLOGY

The research design employed a case study approach using ethnographic methodology. The unit of analysis was the internal formal and informal communication system and the subsequent communication practices of personnel involved with special education issues.

Qualitative data were collected from internal staff and administrators through observations; structured individual interviews; focused group interviews; and, review of Department documents, records, publications and studies. The three research questions were used as guides to extracting and correlating findings from the data supplied by these sources. A questionnaire was then sent to all special education personnel to validate the findings prior to drafting of the report.

At the onset, a comprehensive sample of participants meeting the specific criteria (of personnel in the agency with work related to the provision of special education services) was selected for the interviews, focus groups and questionnaires. Project 91-99 team leaders identified over 60 such people across the DOE for the researchers.

Second, ten people were selected for individual interviews from the list of sixty using a combination of purposeful sampling strategies. The goal of the sampling methodology was to obtain maximum variation sampling from among a group of sixty information- rich participants. The audit mechanisms identified below provided opportunities for personnel associated with special education to express their communication concerns, needs and preferences.

Third, the following audit procedures were employed to collect the data used for this analysis:

1.    A content analysis of written documents yielding an understanding of the impact of the reorganization on communications among Special Education personnel (See Appendix VI).

2.    A series of interviews with key personnel to gain a qualitative account and overview of the current communication process, the workload of staff, and their opinions (See Appendix II).

3.    A series of focus groups sessions with selected staff in special education to verify preliminary findings, a conceptual diagram of the communication flow, and up-to-date perceptions (See Appendix III).

4.    A user perceptions survey yielding quantifiable data on staff perceptions, and use of existing communication technology to provide an understanding of user behavior and communication needs (See Appendix IV and V).

5.    Random observations of administrative operations were made during the period February through May, 1993.

Fourthly, the researchers analyzed the findings through the categories of physical setting, filtering devices, technical devices, user behavior, and organization support and maintenance:

**Physical Setting:** a unit of analysis which examines the physical setting (layout, furniture, equipment, workspace) of the site with the goal of improving information flow, employee productivity, decreasing office noise and distractions and increasing or decreasing information flow through offices.

**Filtering Devices:** examines the screening devices at work in an organization that eliminate junk mail, color code or prioritize messages, manage information sharing on office bulletin boards and other key message areas where the organization could communicate with itself

**Technical Devices:** reviews the software, data bases, training materials and telephone system for efficiency of information access.

**User Behavior:** considers management and staff "knowledge workers" whose expertise must be continually maintained by access to information, the policy process, research, formal and informal consensus-building meetings, team projects, and publications and whose time, especially, must be guarded from routine tasks.

**Organizational Support and Maintenance:** involves the degree and the extent to which the organization supports and maintains the priority for effective coordination and communication. Such support may include training and development, the purchase of additional software for project management, and an on-going, demonstrated commitment to the organization's communication needs.

Through these lenses, individual data sets were reviewed by comparing the same issues that appeared in each set of results. The conclusions, corroborated by the findings, are reported under each category. From these findings and conclusions, recommendations were offered for improved coordination in the internal communication processes of DOE, as it pertains to special education.

## FINDINGS

The results of the audit process are presented in this section for each of the data collection activities; content analysis, interviews with key stakeholders, focused group interviews, network analysis, and user perception survey.

## CONTENT ANALYSIS

The documents in Appendix VI were reviewed from January, 1993 to March, 1993. The purpose in reviewing the documents was to locate communication flow charts, assess such protocols and track the onset of difficulties in communication in the record.

1. THE RESEARCH TEAM FOUND NO INTERNAL, INFORMAL ORGANIZATIONAL CHART LISTING STAFF WITH RESPONSIBILITIES FOR SPECIAL EDUCATION.

**The organizational chart** (Figure 1, DOE: November 30, 1992) provides an overview of the organizational structure of the units reporting to the Superintendent of Public Instruction. However, the chart for **the Prototype of the Center for Educational Leadership** (Figure 2, DOE: March 1990) more accurately describes the staff of the Agency. DOE staff with specific responsibilities for special education are located in the following divisions spread across floors 19-25 of the Monroe Building:

Division of Student Services:

Division of Adolescent Education

Division of Administrative Services

Division of Research, Policy Development, and Information Systems

**The Personnel Directory** for the Virginia Department of Education lists the divisions and individuals assigned to those areas but does not specify all those with responsibilities for special education.

Joseph A. Spagnolo, Jr.
Supt. of Public Inst.
00001
UG
Supt. of Public Inst.

Deborah Ellison
Admin. Staff Spec.
00654
G10
Man. Council Admin.

Ernest W. Martin
Education Division Chief
00704
G19
Assistant Superintendent

Joseph D. Roberts
Audit Director- Internal
00590
G18
Director Internal Audit

Margaret N. Roberts
Exec. Advisor
00472
G17
Public Affairs

Ann H. Smoot
Human Resources Mgr. Senior
00361
G15
Dir. of Human Resources

Ida Hill
Public Inst. Deputy Supt.
00203
G21

Doris L. Redfield
Public Inst. Deputy Supt.
00943
G21

Edward W. Carr
Public Inst. Deputy Supt.
00021
G21

To Be Established
University Consortium

M. Jo Bunce
Education Division Chief
00700
G19
Div. Chief/Early Childhood
Early Childhood

Catherine L. Clark
Education Division Chief
00707
G19
Div. Chief/Policy & Plan
Policy & Planning

Kathryn S. Kitchen
Education Division Chief
00705
G19
Div. Chief/Admin. Support
Support Services

Helen R. Stiff
Education Division Chief
00702
G19
Div. Chief/Pre- & Early
Adolescent

John A. McLaughlin
Education Division Chief
00709
G19
Div. Chief/Research&Eval.
Research & Evaluation

Thomas Elliott
Education Division Chief
00706
G19
Div. Chief/Compl. Coord.
Compliance Coordination

M. Kenneth Magill
Education Division Chief
00701
G19
Division Chief/Adolescent
Adolescent

Education Division Chief
00703
G19
Division Chief/Testing
Assessment & Testing

Dallas Johnson
Education Division Chief
00950
G19
Div. Chief/Prog. Support
Program Support

Cameron M. Harris
Education Division Chief
00708
G19
Div. Chief/Info. Systems
Information Systems

November 30, 1992
Deputy6.dwg

Figure 1

# PROTOTYPE OF CENTER FOR EDUCATIONAL LEADERSHIP

Board Executive

Superintendent of Public Instruction

Internal Auditor

Community and Legislative Affairs; Human Resources

Adult Literacy
Adult Education
Veteran's Education
Proprietary Schools
Residential Schools
Regional Offices

**Student Services**
- Early Childhood
- PreAdolescent
- Adolescent

Humanities
Math
Science
Health
Special
Vocational
Pupil Personnel
Personnel Develop.
Chapter 1
Chapter 2
Instructional Technology

**University Consortium**

**Research, Policy Development, and Information Systems**
- Policy and Planning
- Research and Evaluation
- Testing
- Information Systems

Evaluation
Quantitative Analysis
Budget Development
Policy Analysis
Forecasting
Measurement
Systems Development
Programming
Basic Research
Graphics
Writing
Fiscal Analysis
Computer Operations

**Administrative Services**
- Support
- Regional Services
- Compliance Coordination

Budget Execution
Finance
Accounting
Materiel Management
Transportation
Facilities
School Food
Grant Administration

Field Service Representatives
School Needs Assessments
CEL On-The-Line

Federal Programs Monitoring
School Accreditation
Teacher Certification

Mail Distribution
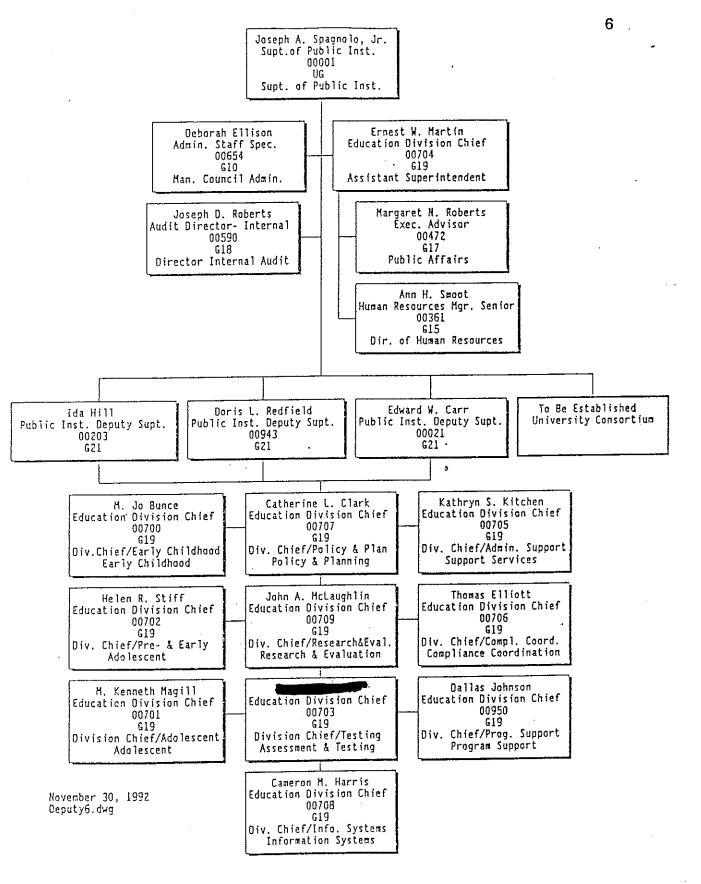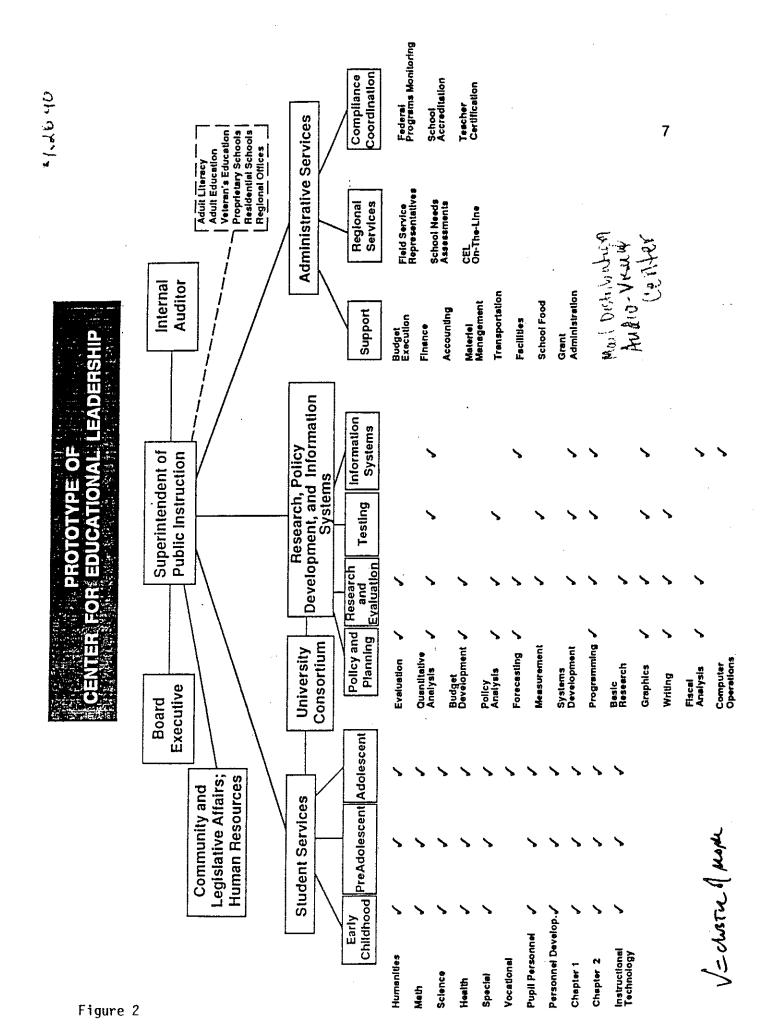Audio-Visual Center

Figure 2

**INTERVIEWS WITH KEY STAKEHOLDERS**

Ten interviews with key stakeholders across applicable divisions provided the opportunity to inquire more fully into the internal communication systems, its requirements and the needs of its users. The interview guide found in Appendix II ensured consistency among the interviews. The researchers transcribed the interviews. The transcriptions are not included in the appendix to protect confidentiality of the interviewees. The transcripts were analyzed according to the classification system for the interview text also found in Appendix II. The interviews yielded qualitative accounts of existing situations, opinions and perceived needs.

The interviews clarified formal and informal communication structures, revealed content of jobs and roles, helped define the values of the organization's culture, and identified the effects of individual personalities on the communication process. At the close of five days' of interviewing, patterns began to emerge that distinguished the barriers, weaknesses and strengths of the internal communications system as a whole and in its components: (1) physical setting; (2) filtering devices; (3) technical devices; (4) user behavior and (5) organizational support and maintenance.

2.   **THE RESEARCH TEAM FOUND THAT DOE PERSONNEL WITH ASSIGNMENTS IN SPECIAL EDUCATION ARE THE MAIN STRENGTH OF THE COMMUNICATION SYSTEM.**

Without the concern and collegiality of these people, the communications needed would not reach people under the system as it presently operates. And, true to the research and organizational literature, staff in this unit have performed despite the absence of a clear and reliable structure. They are the epitome of the knowledge worker of the 21st century--those whose expertise levels are their main job skill.

The interviews portray that the greatest weaknesses of the system are: a) Personnel inundated by poor information management, b) inconsistent channel use, and c) inappropriate levels of information sharing as opposed to actual communication needs.

Considering the diffusion of special educators across several departments, these weakness are enlarged by the absence of a policy on communication.

Interviewees made numerous suggestions for recommendations to improve the system. The most mentioned suggestion involved the need for communication --not information sharing; communication--the give and take of policy consultation, dialogue on issues, agenda setting for meetings, policy updates, the face to face stuff that make up an organization like this. The next most mentioned improvement was to clear up the LAN. Apparently, respondents felt this channel was being used indiscriminately, adding to the information overload.

**FOCUSED GROUP INTERVIEWS**
The focus group interviews were arranged to verify findings from the key interviews, and to explore in-depth other areas of the audit of internal communications practices. Questions and focus areas for the group were prepared from the findings of the Interviews held February 22-March 5. For example, the focus group protocol inquired into the beliefs, vision and planning that drive the communication process; the communication systems in use and the manner they are used in the DOE; and the human resources available--training, administrative support, project management software.

Participants for the focused group interviews were selected by breaking down the list of sixty special education personnel supplied to the research team from the 91-99 Core Team leaders. The sixty personnel were assigned to focus group sessions according to their areas--compliance, early childhood, policy and evaluation, etc. (See Appendix III).

The focus group experience provided a prime example of the inadequacies of the current internal communication system and reinforced findings of the team. For instance, members of the research team and core team planned the dates for the focused group interviews well in advance. The dates were communicated to DOE SPED personnel by LAN two weeks in advance. Personnel were reminded of the meetings by hard copy

memorandum which arrived the afternoon prior to the meetings. Even with these activities, a special education conference was scheduled at the same time as the focus groups. Of the seven focus groups planned, one was canceled, the others were held as scheduled; but only four people of the sixty invited attended. Of those four people, three indicated they were notified by word of mouth to attend.

The four participants confirmed the findings of the preliminary interviews enabling the research team to explore more fully some of the social and structural factors that make up the organizational climate and human resource profile for administrative support at DOE. It must be noted that the validity of the focus group findings were threatened by low attendance, thus creating a need for a larger unit survey to reach the sixty potential respondents.

## MODIFIED NETWORK ANALYSIS

A modified network analysis was conducted during the time of observation from February, 1993 to May, 1993. The analysis, a modified version of the more formal process, served the information needs of the research team. The data that follows were compiled from DOE documents and interview results, and from the most current materials available to the research team.

3.    THE RESEARCH TEAM FOUND THAT THE NETWORKS PRESENT FOR COMMUNICATION AND COORDINATION COULD NOT BE EASILY CHARTED ACROSS SIX FLOORS OF THE DOE.

It is clear from this observation that DOE must examine its formal departments to see how they each communicate within their organizational framework, compare the informal lines of communication indicated by the DOE organizational chart with actual interdepartmental communication, identify groups of people that are frequent intercommunicators, and prepare a network chart of personnel based on expertise.

In the absence of a cohesive unit within the department such as identified in the 1987 study, special education personnel must have networks available for consultation and communication that can be accessed through the organizational structure in place. For example, an informal e-mail list (SPED list) was discovered in the course of the interviews conducted with a sample of key stakeholders during the months of February and March, 1993. Apparently, the e-mail distribution list was developed through the initiative of a staff member. It is used primarily for the user's information distribution needs, and is not widely known or utilized by other special educators.

**USER PERCEPTION SURVEY** (Appendices IV and V)

A user perception survey was constructed to validate interview findings. Sixty (60) surveys were hand delivered to the personnel listed on the Lead Specialist's office master list on April 16, 1993 with a return date requested through interagency mail through April 25. Twenty nine surveys were returned for analysis.

4.  **THE RESEARCH TEAM FOUND THAT SPECIAL EDUCATORS RESPONDED IN A DICHOTOMOUS MANNER TO QUESTIONS REGARDING INTERNAL COMMUNICATIONS:**

    - Twelve of twenty eight respondents believe the secretarial staff effectively route information in a timely manner; eight individuals disagreed; eight individuals neither agreed or disagreed.

    - Fifty percent of the respondents feel that information regarding special education is not regularly transmitted to decision-makers within the DOE; twenty-eight percent disagree.

    - Thirteen respondents felt they did not have an opportunity to express their views when a DOE policy decision is made in the special education area; eleven respondents felt they had the opportunity.

    - Eleven of the twenty-eight respondents feel that information necessary for the performance of their job responsibilities does not arrive in a timely manner; fourteen feel it does.

5.  **THE RESEARCH TEAM FOUND THAT:**

    - The LAN, Voice Mail, small group meetings, informal contacts, and work group products are the channels used most often to distribute special education information to other staff. Newsletters, Bulletin Boards, DOE publications are the least used communication channels.

    - The LAN, Voice Mail, small group meetings, memoranda, work group products, and informal contacts are the channels by which they most often receive special education information. Special educators receive information least often by E-MAIL, Bulletin Boards and Newsletters.

- If they had important special education information to distribute, most staff would use the LAN, followed, in some cases, by memo, while others prefer face to face meetings. The only other channel mentioned was voice mail.
- Staff perceive that important special education information reaches them by word of mouth, informal contact, the LAN, or memos in that order.
- Special educators prefer the LAN followed up with a memo as the best channel to use.

6. **THE RESEARCH TEAM FOUND THERE IS A WIDE RANGE OF ADAPTATION TO THE USE OF ELECTRONIC TECHNOLOGY IN THE ORGANIZATION; RANGING FROM THOSE WHO PREFER TO IGNORE IT TO THOSE WHO ARE HIGHLY ADEPT IN ITS USE AND EAGER TO SEE HOW THE LATEST HARDWARE AND SOFTWARE MIGHT ASSIST THEM IN THEIR WORK.**

Of the first group, respondents surmised they lacked sufficient training in the use of computers. The second group had more than sufficient training and were eager to learn more as well as to ask for a standard computer communications packages.

All respondents agreed on the importance of communication skills and computer expertise to work performance. In addition, there was a consensus on the use of the LAN for sending and receiving messages. It was evident that DOE special education personnel had a sufficient number of communication channels through which to work, yet many lacked the consistency of administrative support to adequately process their workloads.

There was agreement among the majority of respondents for accountability, personnel should be brought up to speed on communication skill and computer training by alert managers who should know their staff's capacities. This training should be provided by an organization committed to supporting the continued growth and development of its workers.

7.  THE RESEARCH TEAM FOUND THAT SPECIAL EDUCATORS NEED THE FOLLOWING INFORMATION TO PERFORM THEIR JOBS:

-   All RFPs related to special education.
-   New policies pertaining to special education.
-   Regulation Interpretations/Hearing Decisions.
-   Best practices with contacts' phone number.
-   Roster of DOE staff responsible for areas.
-   DOE positions on issues.
-   Project up-dates/summaries/from the lead on each project or function in data base format with phone numbers.
-   Role clarification for technical assistance staff. Management's expectations for players involved in special education. Clarification on the degree one responds to special education issues outside of project team responsibilities.
-   Information sent to LEAs in a timely manner.
-   Information on federal data collection in a timely manner.
-   Full-time secretarial support.

8.  THE RESEARCH TEAM FOUND THAT SPECIAL EDUCATORS FEEL THE BEST METHODS TO IMPROVE INTERNAL COMMUNICATIONS WOULD BE TO:

-   Make one person responsible (as a function) to serve as a clearinghouse for information.
-   Create a list of DOE individuals who need to receive special education information. Inclusion is better than exclusion.
-   Develop a policy for dissemination of information with timelines. Develop a process for sending and sharing information internally and externally.
-   Provide status reports on special education projects four times per year to maintain big picture.
-   LAN is the best method and must be used more effectively by a proactive staff which places a high value on accountability.

- Conduct regular meetings. Bi-monthly--2 hour meeting in order to dialogue on issues. Another suggested 1 hour monthly meeting/rotate leader/agendas.
- Provide impact statements for every project on students with disabilities.
- Put everyone on same computer program. A creative, teaming environment needs ideas; communication is not paper.
- Special education bulletin board on LAN where staff could put information on projects, questions.
- Build skills communication into employee evaluations.
- Set-up standing committee, with members drawn from each Division to deal with policy dissemination and coordinating projects.

# CONCLUSIONS

**BACKGROUND**

The Virginia Department of Education is an agency in the process of transition into a new era for educational reform to which it has already made significant contributions. DOE has a strong organizational culture, based on values of quality, timeliness, innovation and traditions and a workforce that easily epitomizes the knowledge workers so prized in a high tech information rich culture. The organization itself is at the next stage of its evolution--that of surveying its communications needs and methodology--and its willingness to examine this stage on the unit level is laudable and necessary.

Special education personnel at DOE are assigned a complex set of activities, complicated by operational and program requirements involved with the provision of services for students with disabilities in Virginia. This work must be done in one of the most highly regulated policy environments, with strict federal and state compliance requirements.

Successful implementation of services for students with disabilities requires that activities and timelines are addressed on schedule with neither service nor funding interrupted. Thus, the provision of services for these students in Virginia requires an inordinately high degree of coordination and communication given the complex policy environment and the multiplicity of its many constituents.

The internal communication structure of DOE was established when the organization was much larger and cast in a more traditional mode, necessitating the command and control functions required of a public bureaucracy for the delivery of goods and services to the public. A recent, far-reaching reorganization has changed the structure of the organization from a bureaucratic model to that of a more fluid and flexible model, designed in part to accommodate the demands of a complex environment. The reorganization has involved staff, new products, designs, procedures, language and working relationships. This degree and intensity of change has not been matched by corresponding developments in its internal communications systems.

Efforts have been made by management to insure that special education personnel be mainstreamed into the workflow of the organization. However, there appears to be a greater need to actively promote the interaction and structures necessary to support the team approach among personnel with special education responsibility.

Communication in the usual day-to-day environment has been disrupted by the reorganization. The coordination required for performing highly complex information tasks in a highly unstable environment is subject to greater risk because the traditional organizational structure for command and control has been altered.

Additionally, the cohesion usually present within a unit assigned a specific set of responsibilities had been disrupted and continues to be dispirited by the assignment of special education personnel across several disciplines. Thus, personnel are without traditional means of communication, and must devise new methods for communicating and coordinating with key personnel in matters that relate to the provision of services for special education.

1.    THE RESEARCH TEAM CONCLUDED THAT THERE WAS INADEQUATE COMMUNICATION AMONG SPECIAL EDUCATION PERSONNEL ACROSS DEPARTMENTS.

This finding emerged explicitly in analytical statements and through anecdotal information, and implicitly through expressed feelings and concerns. Specifically, it was felt that the isolation of personnel assigned special education responsibilities was made more difficult by: a) the lack of a clear statement of their role in the new organization and its priorities, b) an accurate and up-to-date organizational chart reflecting their membership, c) the absence of several of the many rituals that serve to solidify a team, d) and accurate personnel list by expertise, e) regular and efficient communications, f) information flow and staff meetings, g) anticipated work tasks and impending deadlines, and h) regular consultation on policy.

Many of those interviewed feel they are choked with more information than they need, routine tasks which should be more effectively routed to support staff or a data base, too many meetings, out-dated work methods, and a perceived lack of support for their actual needs and concerns regarding the completion of their work tasks in a highly stressful, and at times, ambiguous environment where no one seems in control of overall operations.

Upward, downward and lateral communication was perceived as a problem by many interviewees. The concerns expressed were primarily specific and task- focused on information necessary for day-to-day operations--communicating and coordinating to meet funding deadlines for the provision of services for children with disabilities.

Specifically, information about deadlines and anticipated problems is not reaching appropriate parties. Reaction to difficulties is prompt but a consensus exists that such reaction time and the effort to meet crises could have been avoided. There was a sense that authority needed to be exercised on the part of management to address the problems in personnel and/communications usage.

Related to these practical problems in internal communication is the need for more interaction and communication across all departments and from all directions in the organization. A great many opportunities for doing so--and for building organizational support and maintenance, and sustaining the much needed camaraderie for a learning organization resides in the structure and mechanisms already in place.

Although there is general agreement that the reorganization has brought many benefits and a recognition that interdisciplinary team work approach is preferable, interviewees expressed concern about the continued effects of the reorganization on themselves and their colleagues. Personnel expressed their concerns over the value of continuing education seminars in an environment which seemed to demand more, yet provide them with less support for the degree of difficulty of their work.

There is a consensus that the reorganization's effects will continue as the organization evolves, and a recognition on the part of some that communication difficulties are a natural part of the life cycle of an organization. Others view these problems as more of the same difficulties of the old organization. Regardless, there is growing concern that management needs to systematically address these problems--whether remaining or new.

## THE PHYSICAL SETTING

An examination of the physical setting includes the layout, furniture, equipment, workspace of the site with the goal of improving information flow, employee productivity, reducing office noise and distractions and increasing or decreasing information flow through offices.

2.    THE RESEARCH TEAM CONCLUDED THAT KEY STAKEHOLDERS WERE CONCERNED WITH ALL OF THE ITEMS MENTIONED ABOVE, PARTICULARLY WORKSPACE, SPACE FOR TEAM MEETINGS AND THE MANAGEMENT OF INFORMATION FLOW.

For example, respondents in the preliminary interviews, focus groups and user behavior survey made note of these items with special emphasis on the management of information flow.  One respondent noted:  "We're inundated with information--we need some kind of screening process for issues that we routinely address."  Another replied: " Our work load has quadrupled--the team process spans boundaries and functions--the problem is there's no termination.  We're papered to death and computered to death." Workspace and space for team meetings were also noted by respondents in the Team Focus brainstorming session in March, 1993.

**Layout.**  The Virginia Department of Education occupies Floors 19-25 of the Monroe Towers in downtown Richmond.  Each floor can be characterized as an open space office environment.  This environment serves the reorganization of the DOE from a centralized, traditional model of communication where communication follows a predetermined pattern to that of a modified matrix organization where members are organized and regrouped in teams to do the work of the organization and are encouraged to communicate with one another equally.

Special education personnel are located in several sites across the six floors of the DOE. The space assignments cause staff to jockey for meeting places and times.  This structural situation further aggravates the time required for meeting.  As respondents

noted in Focus Group interviews: "There's little time for SPED people to make input; there are few chances for us to meet and confer." This opinion was echoed by an interviewee who remarked, "So much of special education is interpretative; we need to confer with each other and the time and the space to do so in!"

**Signage.** Signage (one of the devices by which an organization talks to itself and signals its interactions with the environment) on all floors of the DOE is minimal. Units are named but there is no personnel directory available for review, nor is there an alphabetical listing of staff or staff by office number. Offices are not numbered but follow a north-south, east-west orientation with no central directory for each floor.

**Reception & Information.** The reception and information area on each floor is positioned appropriately but in many areas does not function as such. Ambiguity in staff roles was noted in early site observations and cited as problematic by key stakeholders in the preliminary interviews. Several interviewees addressed the overall lack of professional secretarial support and questioned their integration in the new organization. Another said, "We're wasting the resources of 80+ secretarial staff. Change their roles to be more inclusive; put them on teams to help with idea generations not just take notes."

3. THE RESEARCH TEAM CONCLUDED THAT PERSONNEL ASSIGNED SPECIAL EDUCATION DUTIES IN ADDITION TO THEIR USUAL JOB DESCRIPTION, MUST CONTEND WITH THE ABSENCE OF THE FOLLOWING NEEDED STRENGTHS:
   - Clear use of bulletin boards and message areas to present news about unit progress and changes.
   - Adequate floor directions and staff directories by location and expertise.
   - Adequate and regular meeting space for team projects and consultations.
   - Bulletin boards lack unity and a sense of identity of the agency, its overall mission, purposes and accomplishments.
   - Reception areas are ambiguous in character.

**FILTERING DEVICES**

An examination of filtering devices include: screening devices that eliminate junk mail, color code or prioritize messages, manage information sharing on office bulletin boards and other key message areas where the organization could and should communicate with itself. The goal of filtering, when used by appointed gatekeepers, is to reduce information overload, distortion and omission. Information can then be verified, bypass nonessential parties and reach essential parties through the many communication channels available to the organization.

4. THE RESEARCH TEAM CONCLUDED THAT THE INFORMATION THAT ENTERS THE ORGANIZATION IS NOT SUFFICIENTLY PROCESSED AS IT MOVES THROUGH THE ORGANIZATION TO THE DECISION-MAKERS.

The responsibility for filtering and processing the information pertaining to special education through the assorted personnel in the DOE often falls to one person--the point person for special education. Traditionally, the Director has been a fact finder and information linker.

Interviews with key stakeholders cited problems with information flow. This finding was verified in Focus Groups respondents noted: "The current system is haphazard, inconsistent; no one knows where things need to go." An interviewee echoed that concern: "Some people don't know how to ask and don't know they need to know." Another interviewee noted: "We need coordination of issues and activities--an activities list and timetable, some kind of master plan for special education."

There also appears to be an inconsistent use of front line staff responsible for the day-to-day inquiries from the public to the organization and within the organization. Respondents, in the interviews, user behavior survey, and focus groups, noted the absence of the benefit of day-to-day use of front line staff: "I do these routine things because I have to--if I don't do them, they won't get done." "In the aftermath of the

restructuring, things have gotten much worse in terms of workload. The attitude from management is "You will get it done."" "We need a directive ... to have secretaries open and route the mail, and also take a good look at the secretarial pool."

**The Research Team concluded** that the management of information is affected by an insufficient number of filters and gatekeepers to record messages, open and route mail, sort nonessential from essential information and screen and route calls. As a result, non-essential as well as essential information moves through the organization to its decision-making center, taking up the valuable time of experts and knowledge workers with routine tasks. This adds to the increasing workload of staff.

Furthermore, important information is often lost in the mass of information moving through the organization; deadlines, meeting notices, policy advisories, changes in regulations often move through the same channels with advertising. Information may not be received on time, in the right place and in a form that is specific enough and understandable enough for a prompt response. Often this is the context that forces projects off their timelines. The sheer amount of unprocessed information moving through the organization without the benefit of filters and gatekeepers hampers overall organizational effectiveness and must be addressed on a unit level.

5. THE RESEARCH TEAM CONCLUDED THAT THE ABSENCE OF SUFFICIENT PROCESSING CAUSES PROBLEMS FOR SPECIAL EDUCATION PERSONNEL SUCH AS:
   - Overabundance of irrelevant information.
   - Lack of clarity about who needs what information.
   - Lack of distinction between information and communication.
   - Difficulty in synthesizing relevant information.
   - Difficulty in identifying of information requirements.
   - Difficulty in maintaining two-way communication processes.

As a result of insufficient processing, <u>downward, upward, and lateral communication processes</u>, as it affects special education, experience negative effects that impede effective communication and coordination.

- Sheer mass of information.
- Inaccessibility of managers.
- Over/under response to information needs.
- Lack of confidence/trust in colleagues.
- Micromanagement of nonessentials.
- Multichannel distortions.
- Unclear role assignments.
- Unclear workload designations.
- Overformalization.
- Inordinately complex data.

6. THE RESEARCH TEAM CONCLUDED THAT THERE WERE SEVERAL WEAKNESSES PRESENT IN THE DOE'S FILTERING DEVICES:

- Insufficient numbers of filters and gatekeepers to deal with the information processing needs of the unit.
- Computer time and e-mail subject to junk mail that clogs other communication channels.
- Insufficient memory and recall on the voice mail system.
- Data Bases are insufficient for present user needs.
- Hotline calls are routed to expert staff.
- Expert staff's time and attention is wasted with routine matters.
- Consistent professional support from the secretarial staff for managing information flow.
- Secretarial support is insufficient for the information and team project needs of personnel.

## TECHNICAL DEVICES

An examination of **Technical Devices** includes: the software, data bases, training materials and telephone systems for efficiency of information access:

7. **THE RESEARCH TEAM CONCLUDED THAT THE CURRENT INTERNAL COMMUNICATION SYSTEM CONTAINS A SUFFICIENT NUMBER OF TECHNICAL DEVICES AND COMMUNICATION CHANNELS AND AVENUES FOR ACCESS. HOWEVER, THE INTERNAL SYSTEM SUFFERS FROM INCONSISTENCY, AND UNDER-AND OVER-UTILIZATION OF ITS MANY CHANNELS BY ITS USERS.**

The communication channels and technical devices available for communication in the DOE, include:

- LAN
- Voice mail
- FAX
- E-mail
- Computer conferencing
- Memos
- Bulletin Boards
- Small Group Conferences
- Large Group Conferences
- DOE Publications and Work Products

However, the flow of information through the DOE's formal and informal internal communication networks can best be described as inconsistent, erratic, haphazard, and subject to the varying skill levels of the human resources at work in a highly complex and constantly changing environment.

As a result, the internal information needs of the staff are served by a number of competing channels. Those needs are subject to the senders' and receivers' skill levels rather than tailored to the needs of the organization or more particularly, to the needs of the personnel under study.

Data sources also listed these irritants: Non work-related, all users messages on the LAN. The profusion of information. The absence of sorting mechanisms. The lack of

available time for easy access and review of existing projects. The lack of a central information storage point such as an electronic bulletin board or internal data bases for updates on special education projects.

One respondent summed up: "We need to contract out for a professional data base manager to come in here, help us organize and do this right from the ground up. We ought to be able to access our publications, read about our products, tap into information from our internal communication systems' capabilities."

What has happened to communication practices and procedures for personnel at DOE is a predictable, as well as an unintended, consequence of the complexity of their work and the scope of the organization's transformation and continual evolution.

Essentially, what had happened in the life cycle of the DOE is that traditional work methods in the 1990s have collided with the demands of information overload on knowledge workers. Prevailing models of work organization--group meetings, memos, etc.--and the bureaucratic command and control mechanisms that promoted those work methods must be adapted to the demands of the complex policy environment. That adaptation must come from increased dialogue within the DOE and units on their own communication needs and should be addressed in a systematic manner. Communication is far too powerful a variable in an organization's overall effectiveness to be left unfocused.

Interviews with key stakeholders yielded a number of instances where respondents listed what needed to be done to make use of the technical devices at hand. Comments and remarks on this area in particular were rich with information and awareness of the suggestion's feasibility for the agency: Some representative remarks include: "We really need to act more like a think tank and have the products we produce available to use on a data base--we need to start it up right with a data base manager to come in, sort the information and make it available to staff."

Another interviewee noted: "The problem with internal communications is really behavioral--pick this up in the performance evaluation and say to people, 'here are the rules.'" Still another remarked: "The technology is there for us to use but we're so busy putting out fires that it interferes in our ability to communicate--the secretarial staff could help with some of this." Other respondents noted: "Stop the garbage on e-mail and make computer proficiency mandatory." "We have a calendar function that could easily be used to help schedule meetings--in theory we do, in practice, people don't." "I just spent two hours trying to arrange a meeting for five people!" "I agree with making people responsible for what they communicate. But, there's not always time for me to read RFPs and keep abreast of projects. Some of us have to make reports on progress, why not save the reports on IBM and share it on the LAN for everyone in special education to tap into?"

Others say "Don't add another thing to the computers!" "Clean up the computer. All-users' messages are an irritant." "Adjust the communication flow by using focus topics in special education that we can tap into on a regular basis through some kind of mechanism that will unify the organization." "My voice mail shuts off after a certain number. There's no one to retrieve messages except me." "We need laptops and modems, toll free voice mail, mail dating on voice mail and other mail."

8. **THE RESEARCH TEAM CONCLUDED THAT THE CAPACITY OF THE AVAILABLE COMMUNICATION CHANNELS ARE HAMPERED BY APPARENT WEAKNESSES IN THE USE OF TECHNICAL DEVICES.**
   - Insufficient data base management systems.
   - Insufficient data bases.
   - Insufficient staff skill level for access and optimal use of all communication channels.

- Under-utilized calendar function on internal systems for planning functions.
- Reporting function on internal systems is under-utilized, cutting off lateral interdepartmental communication needed for coordination and reduction of overlap.
- Inconsistent use of technical devices for information purposes and communication purposes.
- Inadequate voice mail storage and retrieval system.

## USER BEHAVIOR

An examination of **User Behavior** includes: access to information, the policy process, research, formal and informal consensus-building meetings, team projects, and publications.

9. THE RESEARCH TEAM CONCLUDED THAT INFORMAL CONTACTS AND NETWORKING RELATIONSHIPS ARE USED MOST OFTEN TO COMMUNICATE AND RECEIVE INFORMATION.

Access to the systems is subject to the varying degrees of collegiality and skill level available to the individual in a highly complex and changing environment. Efforts to communicate and coordinate are hampered by inconsistent use of internal communications mechanisms. For example, some prefer to use their e-mail for all communication while others avoid e-mail and prefer a hard copy notice. As a result, staff look to many sources for meeting notices rather than one reliable source.

10. THE RESEARCH TEAM CONCLUDED THAT THE FOLLOWING WEAKNESSES IN USER BEHAVIOR ARE PRESENT.
    - Insufficient and inefficient meeting and consultation times stifle the consultation and consensus process related to special education work.
    - Insufficient understanding of information versus communication places the management of information flow at high risk for coordination and effectiveness.
    - Inadequate use of computer time for information sharing and reporting.

11. THE RESEARCH TEAM CONCLUDED THAT THE FOLLOWING STRENGTHS IN USER BEHAVIOR ARE AVAILABLE TO IMPROVE COMMUNICATION.
    - The quality and calibre of colleagues.
    - Timelines and responsibilities are met because the efforts of those who routinely work beyond their time limitations at the DOE.

- Strong informal communication network among some staff.
- Shared leadership among some staff.
- Sense of loyalty and commitment to group.
- Efforts to communicate aided by the voluntary collegiality of staff towards one another.
- Collective expertise in state government work among staff.

## ORGANIZATIONAL SUPPORT/MAINTENANCE

The examination of **Organizational Support/Maintenance** involves the degree and the extent to which the organization supports and maintains the priority for effective coordination and communication. Such support may include training and development, the purchase of additional software for project management, and an on going, demonstrated commitment to listening and attending to the organization's communication needs.

12. THE RESEARCH TEAM CONCLUDED THAT THE PERSONNEL ARE INSUFFICIENTLY SUPPORTED (AND ILL-TRAINED) IN THE MAXIMUM USE OF THE EXISTING EQUIPMENT. AS A RESULT, COORDINATION AND COMMUNICATION SUFFER.

There is an uneven skill level, training and performance on the part of DOE managers and staff in at least two important areas of communication in a public organization:

- Fostering interdepartmental communication.
- Selecting appropriate communication channels.

Some respondents and interviewees noted the internal communication process was heavily dependent upon user behavior. Since selecting appropriate channels requires users in the organization to seek the proper instrument to communicate a particular message, they noted: "Flattening the organization worked really well--we got rid of lots of deadwood but there are still people who don't use their computers--and that can be addressed by those in authority."

Several other Focus Group respondents felt the main problem area was: "The general devaluation of special education in the overall scheme of things and the resulting effects on organizational climate and communication." One respondent noted: "There is no leadership in special education--the communication we receive is reproduced--in a creative, teaming environment, we need ideas communicated not printed paper."

**13.** **THE RESEARCH TEAM CONCLUDED THAT THE LONG TERM EFFECTS OF THE REORGANIZATION CONTINUE TO IMPACT COMMUNICATION AMONG SPECIAL EDUCATORS.**

During the observations of February through May 1993, personnel seem overextended. In addition to feelings generated by the increased workload, personnel in special education feel cut off from traditional organizational support structures for the work expected of them, further intensifying their feelings and jeopardizing their camaraderie.

The majority of respondents understood the importance of effective communication practices for organizational performance: "Our internal structure is loose, not formalized in any way--it's untrustworthy--communication depends upon collegiality, coordination, and is occasional. We must do something because the field of stakeholders are very aware that DOE is overextended..."

The **Research Team concluded** that the opportunity for face-to-face contact with supervisors is limited. The User Perceptions Survey also verifies that a majority of respondents feel problems in operations must be dealt with in face-to-face settings with managers. Specifically, respondents cited their own accountability as well as the declining lack of meeting time and ineffective meetings and meeting methods. "Communication requires a giver and receiver of information--a dialogue. Staff needs to be proactive in communicating their own issues and others--the Electronic bulletin board is best--no one is left out."

Other respondents noted:

- "We need to prioritize our work and information--it all depends upon the type of information and the perceived need for dissemination--the LAN is the quickest and easiest to get to people; a product could be distributed for longer lasting value and meetings arranged for feedback."
- "We need to ensure inclusion of staff in the policy loop of those who may need to, or can clarify the information. Inclusion is better than exclusion."
- On meetings: "Make meetings well done--put out the agenda on the LAN ahead of time, outline four points for discussion before hand. If people can't make meetings, follow up with a bulleted summary."
- On meeting methods: "Information comes at us from all sources--someone might use a hard copy while I use e-mail. You never know where to expect the information to come from. I spend a lot of time looking for information in different sources." For example, respondents noted: "Everyone should be on the same computer program. People who use the MAC do not always get information to people on DOS and vice versa."

Respondents also remarked on the absence of needed meeting and consultation times for hammering out policy issues: "Meetings could be good but are poorly planned, not well done, conflict with other projects." "The key to the problem is so much of special education is interpretive--we need to confer with each other, to have the time and the space to do so." Focus Group respondents echoed their concerns: "There's no way for SPED people to make input, to voice their concerns--no chance to meet and confer." An interviewee noted: "The team projects have eaten up and taken over our meeting times."

Others noted the difficulties of communicating across departments to keep each other informed, and to keep up with developing projects and overall issues.

**The Research Team concluded** that there is a lack of clarity in the role of special education in the restructured organization. A strong minority of user behavior survey respondents and a majority of interviewees pointed up this need: "Our agency needs to clarify and publicize just where SPED fits in the whole new vision of world class education." "I need to know management's expectations of players involved in SPED and role clarification for staff." "I need clarification on the degree to which I respond to special education issues outside my project team responsibilities." "What does the agency see as SPED's parameters--is this what is holding us back?" "They need to rewrite the vision in the operating manual."

Finally, the **Research Team concluded** that the management of the information flow through the organization as it pertains to special education could be improved significantly by fully integrating the professional secretarial support staff into the work unit and team projects of the units. They could help organize information flow.

14. THE RESEARCH TEAM CONCLUDED THAT THE FOLLOWING WEAKNESSES IN ORGANIZATIONAL SUPPORT/MAINTENANCE ARE PRESENT.

- Insufficient staff and measures of support expected in a highly complex organization and of highly complex work.
- Up-to-date staffing lists by expertise.
- Lack of project management software.
- Insufficient Continuing Education programs touching upon a more problem-oriented issue of the "Learning organization" such as communication in a matrix organization; the pros and cons of matrix management; advanced team building, the expanded Meyers-Briggs inventory and other management-related materials.
- Need for updating the interpersonal and skill levels of managers as the key communication links, information seekers and information providers in the agency.
- Lack of clear policy on communication.

- Lack of support for communication expertise provision in performance feedback.
- Insufficient assignments and responsibilities for day-to-day operations for the secretarial staff.

**15.** **THE RESEARCH TEAM CONCLUDED THAT THE FOLLOWING STRENGTHS ARE PRESENT.**

- The awareness level created by far-reaching organizational transformation.
- The vision-setting expertise of current leadership.
- The addition of new staff with communication and managerial skills suitable for this level of complexity.
- The concept of the learning organization ready to be tapped given the appropriate actions by management.

# RECOMMENDATIONS

The recommendations contained in the report were considered with the finance and skill level of the DOE in mind and are aimed towards improving communication flow, selecting appropriate communication channels, developing effective performance feedback systems, fostering interdepartmental communication and sustaining an innovative spirit among special educators.

1. **Improving the management of information flow** in the DOE. Managing Information Flow is regarded as the third dimension of organizational excellence--managing people, tasks and information.

2. **Selecting appropriate communication channels.** Selecting appropriate communications channels requires users in the organization to seek proper instruments to communicate a particular message: advises an organizational policy on communication with full knowledge of the channels and their possibilities as well as a working awareness of the complexities of the communication process and the need for effective coordination in a complex policy environment.

3. **Developing effective performance feedback systems**. Developing effective performance feedback systems requires communication assessment of the methods and measures used in the organization to improve employee performance so as to increase organizational performance.

4. **Fostering interdepartmental communication.** Fostering interdepartmental communication produces a supportive communication climate in an organization. Unrecognized problems in this kind of interorganizational communication result in conflict, low performance, time delays and ineffective decision-making.

5.    **Creating and sustaining an innovative spirit.** Creating and sustaining an innovative spirit creates an overriding organizational concern for fostering and sustaining in its staff the process of innovation: idea generation, feasibility analysis, reality testing and implementation.

**Primary Recommendations:**  The following recommendations should be implemented immediately.

THE RESEARCH TEAM RECOMMENDS THAT

1.    A MEETING OF ALL SPECIAL EDUCATION PERSONNEL SHOULD BE HELD ONCE A MONTH ON A REGULARLY SCHEDULE BASIS - THE MONDAY AFTERNOON FOLLOWING THE STATE BOARD MEETING COULD BE RESERVED FOR SUCH A MEETING.

Meetings should be scheduled well in advance with agenda items and requests for feedback communicated on the LAN, followed up by a hard copy.  A summary of items discussed should be distributed in a timely fashion to attendees and to those unable to attend.

2.    THE PERSONNEL CHART BE RECONFIGURED TO IDENTIFY SPECIAL EDUCATION PERSONNEL.

The existing organizational chart for DOE should also be redesigned to include all personnel but particularly those with staff functions and the professional secretarial staff.  Additionally, DOE needs to revisit the project designation descriptors--functional, mission critical, etc. on those routine matters that affect special education funding and provision of services.

3.    **A SIGNIFICANT EFFORT MUST BE UNDERTAKEN TO EVALUATE THE INTEGRATION OF THE PROFESSIONAL SUPPORT STAFF INTO THE DAY TO DAY OPERATIONS AND THE INCLUSION OF THEIR EXPERTISE IN THE TEAM PROCESSES, UPGRADING RESPONSIBILITIES WHERE APPROPRIATE AND DESIRED BY MEMBERS OF THE UNIT.**

This professionally trained work force is a significant resource that is not being fully utilized. Their full activation would assist the DOE in general and those with responsibilities for special education in terms of improved communication and coordination.

4.    **THE INFORMATION THAT DOE PRODUCES, PUBLISHES, STORES AND SUPPLIES TO ITSELF COULD BE A BETTER RESOURCE IF DOE CONTRACTED OUT FOR A PROFESSIONAL DATA BASE MANAGER WHO COULD DESIGN A SYSTEM TO FIT USER NEEDS WHILE EXPANDING THE KNOWLEDGE BASE AND ACCESS TO THAT BASE FOR AGENCY PERSONNEL.**

- DOE units should request that all projects--current and pending--be reported on the LAN for an overall picture of the organization that needs to be communicated to the all-important internal wider audience for best effect.
- Sufficient data base storage,management and access is an important resource for a knowledge-intensive organization. DOE must be able to communicate effectively with itself about its own products, work processes and policies.

5. **A LIST OF ALL SPECIAL EDUCATION PERSONNEL SHOULD BE COMPILED AND MAINTAINED WITH A NOTICE OF THEIR SPECIFIC AREAS OF EXPERTISE.**

This list should be computerized, and placed in a data base, available electronically, and periodically updated. A formal special education mail list should also be established and available on the LAN.

6. **IMPORTANT INTERNAL COMMUNICATION SHOULD BE TRANSMITTED BY LAN FOLLOWED BY MEMORANDUM AND IN SOME CASES VOICE MAIL.**

7. **WRITTEN SPECIAL EDUCATION INFORMATION COMING INTO THE DOE TO THE LEAD SPECIALIST SHOULD BE CODED FOR DISTRIBUTION.**

The lead's secretary should maintain a regular written communications log indicating to whom it is distributed and the action taken. That log should be reviewed monthly by members of 91-99 Core Team until a Communications Task Force is named.

8. **THE TEAM CONCEPT OF THE ORGANIZATION SHOULD BE SUFFICIENTLY SUPPORTED WITH STAFF DEVELOPMENT OPPORTUNITIES, SOFTWARE FOR PROJECT AND TIMELINE MANAGEMENT AND ONGOING ADVANCED TEAM BUILDING TRAINING.**

- **The internal communications channels currently in place** could be utilized more efficiently and effectively with appropriate training held on-site and during work hours for new as well as current personnel to orient staff to communications routines as well as to enable current staff to upgrade their own skill levels. Under these circumstances, the Core Team (or Communications Task Force) should determine the content of their own training and that of newly-hired personnel, identify staff to organize and conduct the training,

identify the necessary competencies and assess the level of competence and time involved for successful completion of the training.

- **Responsibilities for updating communication skills and demonstrating computer literacy** should be written in as part of the employee's performance evaluation and designed as part of a job enrichment plan in an overall quality of work life package DOE should institute for its knowledge workers. The plan should include items covered in the job description and an approximation of the appropriate communication and computer skills necessary to successfully perform those tasks. Consequences for not meeting minimum competencies should be dealt with on a case-by-case basis and provision made in writing for meeting those competencies on an agreed upon time frame by all parties involved.

- DOE staff need to be trained and then consistently use the Calendar Scheduling function for team meetings

9. **SIGNAGE AND BULLETIN BOARDS IN RECEPTION AREAS ON ALL FLOORS SHOULD BE UPGRADED AND IMPROVED FOR MAXIMUM COMMUNICATION.**

If there is not already an officer for operations or a communications director in place, DOE units should appoint one person per unit/floor to attend to this most under-rated but significant communication device.

Signage and bulletin boards are common areas in which the organization talks to itself---where the DOE could communicate its goals, progress, or share information about its staff with other staff. Empty bulletin boards in a knowledge intensive organization suggests a lack of involvement in the quality of work life of the organization and its staff. The person appointed to this task would upgrade the common areas monthly, report to the unit director and request feedback (and volunteers) from the Communications Task Force.

## Enabling Recommendations

THE RESEARCH TEAM RECOMMENDS THAT:

1. THE MANAGEMENT TEAM ENDORSE AND ACTIVELY PROMOTE THE CREATION OF A COMMUNICATION TASK FORCE TO STUDY THE ONGOING COMMUNICATION NEEDS OF SPECIAL EDUCATION STAFF AND WHOSE WORKPLAN MAY SERVE AS A MODEL FOR STUDIES OF OTHER UNITS.

   The Task Force should be an interunit group composed of members of each division. The matters of numbers, coordination, reporting structure and authority should be kept as flexible and simple as possible to enable problem solving to occur.

   The Communication Task Force should draft a **communication policy** for special education personnel to ensure more formalized, consistent and increased communication and coordination among personnel.

   In a highly complex, unstable environment such as the policy arena of education, a **communication policy** would ensure the following: a) orderly communications throughout the organization is necessary to keep departments functioning smoothly and on schedule; b) prevent redundancy and overlap of staff responsibilities; c) allow for complete answers from the source most qualified to provide the answers.

   Such a policy is an important and logical next step in the evolution of the organization and should address: a) the data base management system, b) a central publications program as well as staff access, c) a systematized routing of information and decision-making protocols, d) an organizational chart based on expertise, e) a series of menu-related information channels on the LAN, and f) the protocols necessary for handling policy issues.

**The Communication Task Force should have the authority to implement** its recommendations/decisions without further approvals. The mechanism of a Communication Task Force could enable staff to immediately address the need for a Management Information System suggested by organization development consultant Gordon Lippitt with:

a)   a plan for developing an information system for effective managing;

b)   a taxonomy of the kinds of decisions and expertise required and flow-charted;

c)   decisions that are related grouped together and assigned to staff or manager;

d)   procedures within the system designed to expedite collecting, storing, retrieving and treating information--that which is predicted in the regularity of reporting and funding activities as well as the exceptions;

e)   the management information system will require control mechanisms that provide for the evaluation of the deficiencies of the information and distribution system;

f)   the management of the information system should be flexible and adaptable to user needs;

g)   in planning for such a system, there should be interface and joint planning between information specialists, general systems personnel, and human systems and communications specialists and operating managers.

2.   THE DOE SHOULD CONTINUE IN ITS EVOLUTION TOWARDS THE REALITY OF
     THE LEARNING ORGANIZATION BY INSTITUTING A QUALITY OF WORK LIFE
     TASK FORCE WHOSE TASK IT WOULD BE TO ADDRESS IN A SYSTEMATIC
     MANNER THE QUALITY OF WORK LIFE NEEDS AND CONCERNS OF THOSE
     PERSONNEL ASSIGNED SPECIAL EDUCATION RESPONSIBILITIES.

To illustrate, the time and work processes of staff in a policy intensive
context must be addressed in a systematic manner that allows for
reasonable time to consult with one another on the issues permeating the
special education field.  That time must be structured into the work day and
work life of the organization through the communications channels, through
more contemporary meeting practices and information sharing, reasonable
expectations of personnel skill levels for communication and computer
proficiency thoroughly examined on the performance system.

**APPENDIX I**

# WORKPLAN/TIME LINE

December, 1992       Initial Meeting
Memorandum of Agreement prepared

January, 1993       Memorandum reviewed by VCU/DOE

February 1-5       Work Plan start-up
Initial meeting on timeline
Review goals and tasks
Discuss time format for work

February 15       VCU/DOE Meeting for workplan/timeline
Agree on start-up date
Identify principal contacts
Identify and interview key personnel
Request work space
Request previous needs assessments
Review existing documents
Chart current communication system
Track information flow
Prepare preliminary chart & identify needs
      and concerns for further study

February 25       Orientation Meetings
Develop Focus Group Format
Identify stages of feedback/audiences on-site
      Plan for draft review schedule

Feb 22, 23, 24       Conduct Focus Group(s) with Staff
Conduct Focus Group with Stakeholders
Transcribe results
Analyze and report results

March 10, 1993       Complete Goal #1:
      Current Communication System
Described in Diagram and
      Validated by Focus Group

on-site       Staff Focus Groups: March 9
Staff Focus Groups: March 17

March 15, 1993       Assess the Current Communication System

| | |
|---|---|
| March 30, 1993 | Complete Goal #2 |
| April 1, 1993 | Develop recommendations for improvements to the Communications Systems |
| April 10, 1993 | Present Draft Section I for Review |
| April 16, 1993 | Conduct User Survey |
| April 30, 1993 | Tabulate User Survey & Complete Goal #3 |
| May 10, 1993 | Present Draft Sections II and III |
| May 15, 1993 | Present Deliverables: |

Executive Summary
Chart of Existing Communications System
Staff Needs
Recommendations for improvements
Supporting Data

**APPENDIX II**

QUESTIONS WITH KEY STAKEHOLDERS

DEMOGRAPHICS:

What is your title

Area(s) of responsibility for Special Education.

Of the 60+ listed, how many in SE are you responsible for?

To whom do you report?  Where are you in the organizational structure?  How long have you been here at DOE?

GOAL #1:  DESCRIBE THE CURRENT COMMUNICATION SYSTEM

1.      Describe generally how communication flows through departmental channels here?

2.      Identify the channels SE information flows through?

newsletters          brochures          how many a month?/week/day?

directives           meetings

e-mail               letters

other

External to Internal:

Internal to internal:

3.      What are the pluses and minuses of each channel?

4.   Do you feel like you know what's going on with regard to SE?

If not, why not?

Give an example where the system has not worked well.

If so, why and where and when does it work well?

And does it work well/poorly on a consistent/inconsistent basis?

When did this start?

5.   If you want to know what's really going on in SE who would you ask?  Name 2-3 people you would call or go to for the information you need.

GOAL #2:  ASSESS THE CURRENT COMMUNICATION SYSTEM

6.   Why do you think that information had not gotten to you?

7.   What concerns do you have about the communication channels SE has available-- their nature, the input, the speed with which things flow through the system to get to the destination point.

8.   Track a policy directive from internal to the state board--how does this policy go through and who is involved?

or 3A. Track the RFP for this work on a dateline to this date.  What were the problems you encountered?

GOAL #3:  MAKE RECOMMENDATIONS

9.      What do you think needs to be done or added to make this system work better?

        And is that suggestion feasible?

10.     Is there anything we missed in asking about communication?

## Interview Protocol

The following protocol or checklist ensured consistency among the interviews:

- Introduction, ground rules, confidentiality
- Title, formal responsibilities
- Other responsibilities related to Special Education
- Reporting structure
- Location on organizational chart
- Length of service at DOE
- Describe how the current internal communication system works
- Identify the communication channels
- Advantages and disadvantages of channels
- Level of consultation about Special Education issues
- Knowledge of/access to decision-makers/network for information
- Concerns about communication channels
- Track information/ RFP/ policy directive
- Suggestions for improvements
- Feasibility of suggestions
- Additional topics to consider

## CLASSIFICATION SYSTEM FOR

## PRELIMINARY INTERVIEW QUESTIONS WITH KEY STAKEHOLDERS

DEMOGRAPHICS:

What is your title?

LEVELS AT DOE:

Deputy    Division    Chief    Lead    Principal    Associate    Assistant

Area(s) of responsibility for Special Education.

NAME LEVELS:

Of the 60+ listed, how many in SE are you responsible for?

To whom do you report?

Where are you in the organizational structure?

How long have you been here at DOE?

## GOAL #1: DESCRIBE THE CURRENT COMMUNICATION SYSTEM

1.    Describe generally how the communication system with regard to Special Education works?

Description of the system:

Physical Setting

Filtering Devices

Gatekeepers

Technical Devices

User Behavior

Organizational Support/Maintenance

Description of system's effectiveness

Description of system's efficiency

Description of suitability to user needs

2.    Identify the channels SE information flows through?

Description of channels:

Number of channels available

Number of channels used

Frequency of use

System for usage

Kinds of channels

Methods of channels

## GOAL #2:  ASSESS THE CURRENT COMMUNICATION SYSTEM

3.    What are the pluses and minuses of each channel?

Assessment of channels for user needs:

Strengths of each channel
Weaknesses of each channel

Strengths of physical setting
Weaknesses of physical setting

Strengths of Filtering Devices/Gatekeepers
Weaknesses of Filtering Devices/Gatekeepers

Strengths of Technical Devices
Weaknesses of Technical Devices

Strengths of user behavior
Weaknesses of user behavior

Strengths of organizational support/maintenance
Weaknesses of organizational support/maintenance


4.    Do you feel like you know what's going on with regard to SE?

Staff access to policy cycle:

Staff inclusion in decision-making
Opportunities for feedback
Opportunities for consensus

Breakdowns in communication
Examples

Communication successes
Examples

Overall assessment of suitability for user needs

Onset of communication problems

Symptoms of communication problems

Implications for service delivery


5.    If you want to know what's really going on in SE who would you ask?  Name 2-3 people you would call or go to for the information you need.

Decision-makers by title

Rationale for decision route

Protocols for decision-making

Access to Information Required


6.    Why do you think that information had not gotten to you?

Access to policy formulation & decision-making

Assessment of coordination activities

Communication breakdowns

7. What concerns do you have about the communication channels SE has available--their nature, the input, the speed with which things flow through the system to get to the destination point.

Suitability for user needs

Coordination needs

Organizational support/maintenance

8. Track a policy directive from internal to the state board--how does this policy go through and who is involved?

Examples of flow for policy/decision-making

Coordination and communication

or 3A. Track the RFP for this work on a dateline to this date. What were the problems you encountered?

Idea for Project 91-99
Trace history as example

Note Workplan for dates and delays

GOAL #3: MAKE RECOMMENDATIONS

9. What do you think needs to be done or added to make this system work better?

Rx for Physical Setting
Filtering Devices
Technical devices/gatekeepers
　　　User Behavior
　　　Organizational Support/Maintenance

And is that suggestion feasible?

    Organizational support/maintenance

    Issues of organizational responses to user needs

    Issues of culture

    Recommendations in order of priority

10.    Is there anything we missed in asking about communication?


Misc. topics to list by category

**APPENDIX III**

# FOCUS GROUP PROTOCOL

A series of ten interviews with key stakeholders involved in the special education issue from across the organization's divisions was held to gather overall impressions of the issues involved. The data were then combed for patterns of meaning that would lead to the need to explore an issue more in depth through focused group interviews.

Focus Groups were organized around three main areas of inquiry grouped under these general headings: Organizational Profile, Human Resource Profile, and Technology Profile. Each area of inquiry contains a set of focus questions (attached) that should guide the focus group moderators as to the types of information sought, both in note taking and in drawing their own conclusions.

The **Organization Profile** will describe the setting, and inquire into the beliefs, visions and planning that are driving the communication process in the Department.

The **Technology Profile** will describe the communication systems in use and inquire into the manner they are used in internal communications.

The **Human Resource Profile** will describe the human resources available to the Department for issues having to do with the provision of services for special education and inquire into the systems that are supporting the implementation of communication and coordination needs into the reorganization plan as it evolves.

# ORGANIZATIONAL PROFILE

**Protocol:** The following areas are to be explored:

**Focus Area: Setting, Structure**

1.    All of you here are professional staff at the Department of Education who have some relation to special education issues--compliance and coordination as well as delivery of services.

As a way to get started, let's talk about the process of communication as depicted in this recent DOE organization chart.

USE OVERHEAD #1:  DOE Organizational Chart

2.      Let's discuss how you feel about the experience of communicating with one another in this organization. Is it pleasant or unpleasant?

        Probe: What are the barriers in the setting/structure of this environment to more effective communication in terms of policies and procedures; human resources; organization and management; material resources?

        What are the strengths of this structure? Where could it be altered for better communication?

        Do you think problems in communicating occur upward, downward, horizontally or diagonally? Which direction is needed to ensure the overall coordination and integration of diverse organizational functions such as topics relating to special education demand?

USE OVERHEAD #2: DOE TEAM PROJECT DECISION-MAKING CHART

3.      Do you think you/your team communicate well with one another, with the organization and with your colleagues in your project?

        Probe: Why or why not? Did other members of the organization outside your team know about your team's work? Should they? What kind of communication do you expect from your co-workers' teams after they finish a project? From the organization? From the Division?

        Would you say then that communication in this organizational pattern described in a recent study is upward and downward with incomplete horizontal and diagonal communication?

USE OVERHEAD CHART #3: THE MATRIX ORGANIZATION

        CHART #4: COMMUNICATION LINKS IN THE MATRIX ORGANIZATION AS CHARTED

4.  **Focus: The Pros and Cons of Matrix Structures**

Does this chart represent the structure as it is ideally intended to be in terms of communication? And does communication occur effectively across all these lines?

Probe: What are the pros and cons of the matrix structure--an organic, open organizational form--on organizational communication?

Advantages:

Combines strengths of both functional and divisional departmentalization.

Helps to provide a blending of the technical and market emphasis in organizations operating in exceedingly complex environments.

Provides a series of managers able to converse with both technical and marketing personnel.

Disadvantages:

Very expensive.

Unity of command is lost (people have more than one supervisor).

Authority & responsibilities of managers may overlap, causing conflicts and gaps in efforts across unites, and inconsistencies in priorities.

Difficult to explain to employees.

Of the four kinds of communication flow, which is the most effective? Least effective? Most underutilized? Most often ignored? The most difficult?

What then can be done to connect the links in the communication process upward, downward, horizontally and diagonally?

What are your recommendations not only to connect but to help the decision-making process?

USE OVERHEAD #6: ORGANIZATIONAL EFFECTIVENESS

**Focus Area: Beliefs, Visions**

1.  Has the need for effective communication in an organization like this been made clear to you? If so, how and when, and is it communicated to you in an organization-wide manner?

2.  Do you believe that social barriers--those within the individual--such as value judgments, differing perceptual bases, selective listening, different frames of references, source credibility, semantic problems or filtering, considerations of self interest and personal space, and poor listening skills are the most prevalent barriers to effective communication?

    Or do you believe that structural factors--those within the organization--such as, status differences, information overload, time pressures and network breakdowns are far more detrimental to the effectiveness of communication?

    Which of these areas do you think affect the communication process the most: the use of clear, concise words, multiple channels, encouragement of feedback, proper climate, regulation of information flow, informal channels, message timing, effective communication skills?

    Communication Audit: an analysis of organizational's internal communication to examine communication practices and capacities and determine needs.

    Do you believe this study of internal communication is a natural occurrence in the life cycle of an organization in transition or do you believe this is just more of the same problem the reorganization tried to resolve?

**Focus Area: Planning**

USE OVERHEAD # : INFORMATION FOR DECISION-MAKING IN ORGANIZATIONS

3.  Is information effectively sorted and sifted as it makes its way through the organization? Do your managers and team leaders communicate through a variety of mediums or do they use one medium in particular? Is there a match between the medium and the message--is the complex message delivered in a face to face encounter or is the simple routine information conveyed in meetings. Do people use the same mediums to communicate without differentiation for sorting?

# TECHNOLOGY PROFILE

**Protocol:  The following areas should be explored:**

**Focus Area:  Technology Applications**

1.　　Some of you use your computer systems extensively, while others prefer different methods of communication--memos, meetings, voice mail, etc. in the organization. Do you see any advantages or differences in one method over the other?

　　　　Probe:  What methods would contribute the most to smooth, consistent and effective communication?  What are the barriers--social and structural--to the use of these methods?

　　　　If you could change the communication system in any way, what would you change?  Probe:  Why?  How would this change make a difference?

**Focus Area:  Organizational Support for Technological Applications**

1.　　Some of you were quite adept at the use of the computer for communication while others signed up and learned at instructional classes.  Do you believe if everyone got up to speed on this tool, communication would work a lot better?  Does the organization offer enough instructional support for this to happen?  Is there released time to learn the computer?

**Focus Area:  Integration**

1.　　Is computer literacy tied to your performance evaluation and should it be?  How do organization members who are not computer literate communicate; is this detrimental or just different?  Is there released time to take classes and are they offered on-site and at accessible times for staff?  Are your needs and schedules surveyed and then classes planned accordingly?

**Focus Area: Collaboration within the Learning Organization**

1.  Do you believe the widespread use of computers--e-mail-the Lan and Virginia Pen--
    would enable the organization to emulate the learning organization in a way it had
    not been able to achieve before?  What does the integration and consistent use
    of computer technology do for your ability to learn from one another?  How have
    you changed, what have you learned since you began relying on the computer?
    Do you use your time differently?  Do you tailor your messages differently; are you
    more judicious with information processing and passing?  Are you careful to be
    consistent with your messages?

# RESOURCE PROFILE

**Protocol:  The following area should be explored:**

**Focus Area:  Training**

1.     How long did it take you to get comfortable with the technology here and the demands communicating made on you?   Prior to the reorganization and afterwards, were you advised that communication may be different/ were you trained on a specific set of software to facilitate communication while anticipating problems--such as using the Scheduler, the LAN, e-mail?  Did you get training on-site about the possibilities of the technology?

**Focus Area:  Software**

1.     There's a new tool in the department called Team Focus.  Have you been trained in how to utilize the instrument for brainstorming?  Do you have confidence the organization will present training on an on-going basis until everyone has an understanding of the tool?

2.     Do you feel that members of your division understand and can effectively work with the managerial style--Style A B C D--of your division chief?  Do you feel that you know the managerial styles and know which style is most effective?

Can you apply the Meyers Briggs Personality Inventory or some other effective team instrument to team building?  Do you feel you could benefit from on-going team building continuing education?  And that managers and teams could benefit from coaching on communication skills in a training environment?

Is this as an essential part of professional development as computer expertise?  Should communication skills be part of your performance evaluation?

Should the organization in turn treat more seriously the job enrichment capacity of team building to improve communication across the board?

USE OVERHEADS

**Focus Area: Administrative Support**

1. What support do you receive from the professional secretarial staff? Do you feel they are an integral part of the organization and know what your work load and work flow is? Do you include them on teams to enable them to develop their own leadership and analytic potential? Is this pool of some 80+ individuals a resource that is underutilized in the organization? What is your best configuration of an effective working relationship between you and your division chief and secretarial staff?

2. Do you use the computer and secretarial staff to schedule your team meetings, to sort voice mail, open surface mail, prepare your letters for your signature, clean up reports and prepare for final production?

   How important is it to involve secretarial staff in the daily work flow of the unit as it relates to progress towards overall organizational goals?

   Do you know where your work fits in with regard to progress towards overall organizational goals?

   Do you think the managing by walking around approach would lessen the status distance between management and staff?

3. Staff stations are positioned on every floor in a manner that suggests they are reception to the area--are they? What message do these stations give to insiders, to visitors?

   In the same vein, the floor directory by the elevator announces the units yet there is no office directory of personnel nor are the offices easy to locate or in any particular order. What message does our signage give to insiders and to visitors?

# WORKPLAN FOR FOCUS GROUPS: LISTING OF ON-SITE WORK

## GOAL #1: DESCRIBE THE CURRENT COMMUNICATION SYSTEM

Monday, February 22
Conduct document review
Review previous needs assessments

Tuesday, February 23
Continue Preliminary Interviews
Continue document review

Wednesday, February 24
Continue Preliminary Interviews
Review comparative units
Preliminary Diagram of Formal & Informal Structure

Tuesday, March 1
Continue Preliminary Interviews
Draft diagram
Prepare focus group arrangements

Friday, March 5
Conclude Interviews
Prepare diagram
Confirm focus group formats

## GOAL #2: ASSESS THE CURRENT COMMUNICATION SYSTEM

Tuesday, March 9
Focus Groups #1 (11) at 9:30AM & 2 (11) at 11:00AM for Divisions of Early Childhood and Adolescent Education Staff
Focus Group #3 at 1:30PM for Compliance Coordination Staff (11)

Thursday, March 11
Focus Group #4 - Program Support (11) 9:30AM
Focus Group #5 - Regional Services (11) 11:00AM
Focus Group #6 with Assessment and Testing, Information Systems, Policy & Planning, Research & Evaluation, Pre & Early Adolescent Staff #7 at 3:00PM

Monday, March 15                    Validate Diagram with Focus Group #8
                                    Assess strengths, barriers, weaknesses
                                    Diagram Revised Structure


GOAL #3:  DEVELOP RECOMMENDATIONS FOR IMPROVEMENTS

Wednesday, March 17                 Validate Revisions & Recommendations with Key
                                        Stakeholders, Staff & Leadership Team
                                    Draft results of Focus Groups for feedback

**APPENDIX IV**

# INTERNAL COMMUNICATION/COORDINATION STUDY
## PROJECT 91-99

## DIVISION OF EDUCATIONAL STUDIES
## PO BOX 2020
## VIRGINIA COMMONWEALTH UNIVERSITY
## RICHMOND, VIRGINIA 23284-2020

April 16, 1993

Dear Colleagues:

The purpose of this letter is to request your help with a study of the internal communication system of those working in Special Education at the Department of Education.

Project 91-99 includes a review of the internal communication system within the Department as it pertains to special education. We have been commissioned to assess the strengths and weaknesses of communication channels and make recommendations to facilitate communication, activities and services.

Enclosed is a survey asking you to respond to questions addressing Project 91-99 communication issues. This survey responds to issues raised during interviews held with DOE staff during February and March, 1993.

Your response to the enclosed survey is extremely valuable to the assessment of communication within special education at the Department of Education. Please do not write your name on the survey. Your responses to the survey questions are anonymous. You cannot be identified by your responses to the survey in the data analysis or any reports of the survey results.

It would be most helpful if you would return the completed survey by April 25.

Thank you for the time and assistance to complete this project.

John R. Pisapia                                          Evelyn A. Jez
Principal Investigator                                  Research Associate

JRP/eaj

# INTERNAL COMMUNICATIONS STUDY

## PLEASE RETURN COMPLETED SURVEY BY APRIL 25

Position at DOE:_____ Time at DOE:_____

**SECTION I: Instructions: The following is a list of statements about communication within the DOE. Please read each statement and circle the one category that most closely fits your response to the statement.**

> **SA = Strong agree**
> **A = Agree**
> **N = Neither agree nor disagree**
> **D = Disagree**
> **SD = Strongly disagree**

1.  Information regarding special education is regularly transmitted to decision-makers within the DOE.

    SA          A          N          D          SD

2.  Special Education information necessary for the performance of my job responsibilities arrives in a timely manner.

    SA          A          N          D          SD

3.  Information necessary for decisions about special education policies and procedures are readily available.

    SA          A          N          D          SD

4.  The secretarial staff effectively routes information in a timely manner.

    SA          A          N          D          SD

5. Information about DOE projects related to special education is regularly reported and/ accessible.

     SA         A         N         D         SD

6. When a DOE policy decision is to be made in the special education area, there is opportunity for my views to be expressed.

     SA         A         N         D         SD

7. Special education concerns and needs are adequately addressed in my division meetings.

     SA         A         N         D         SD

8. The most effective method of sharing information about special education with work colleagues is by face to face meetings.

     SA         A         N         D         SD

9. Communication skills are an important part of my job performance.

     SA         A         N         D         SD

10. Computer proficiency is an important part of my job performance.

     SA         A         N         D         SD

11. Advanced team building skills are important for my work at the Department.

     SA         A         N         D         SD

**SECTION II: Directions:**

12.  Circle the one response category which most closely fits your use of communication methods. Please indicate HOW OFTEN you use the following communication channels to distribute special   education information to other DOE staff.

F = Frequently
O = Occasionally
S = Seldom
N = Never

| | F | O | S | N |
|---|---|---|---|---|
| E-mail | F | O | S | N |
| LAN | F | O | S | N |
| Voice Mail | F | O | S | N |
| Small Group Meetings | F | O | S | N |
| Conferences, Large Group Meetings | F | O | S | N |
| Memorandum | F | O | S | N |
| Work Group Products | F | O | S | N |
| DOE Publications | F | O | S | N |
| Bulletin Boards | F | O | S | N |
| Informal Contacts | F | O | S | N |
| Newsletters | F | O | S | N |

13.  Please indicate HOW OFTEN YOUR RECEIVE special education information from other DOE Staff through the following communication channels:

| | | | | |
|---|---|---|---|---|
| E-mail | F | O | S | N |
| LAN | F | O | S | N |
| Voice Mail | F | O | S | N |
| Small Group Meetings | F | O | S | N |
| Conferences, Large Group Meetings | F | O | S | N |
| Memorandum | F | O | S | N |
| Work Group Products | F | O | S | N |
| DOE Publications | F | O | S | N |
| Bulletin Boards | F | O | S | N |
| Informal Contacts | F | O | S | N |
| Newsletters | F | O | S | N |

**SECTION III: Directions: Finally, please respond to the open ended questions that follow.**

14. If you had important special education information to distribute, which communication channel would you use?

15. Through which channel does important special education information reach you?

16. Which channel do you think is best to use? Why?

17. In order to perform my job at a high level, I need the following information: (Please list).

18. If you could suggest one method for improving the internal communication of the DOE for special education, what would it be? How would this method make a difference in internal communication?

**APPENDIX V**

# RESULTS OF USER PERCEPTION SURVEY

## Table 1:   Question 1

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | A | N | D | % TOT | # | A | N | D | % TYP | # | A | N | D | % TYP | # | A | N | D | % TYP |
| xxx  20 | 7 | 4 | 9 | 71% | 14 | 4 | 4 | 6 | 70% | 4 | 2 | 0 | 2 | 20% | 2 | 1 | 0 | 1 | 10% |
| xxx   2 | 0 | 0 | 2 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx   4 | 0 | 2 | 2 | 14% | 2 | 0 | 1 | 1 | 50% | 1 | 0 | 0 | 1 | 25% | 1 | 0 | 1 | 0 | 25% |
| xxx   2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL  28 | 9 | 6 | 13 | 64% | 18 | 6 | 5 | 7 | 64% | 6 | 2 | 0 | 4 | 21% | 4 | 1 | 1 | 2 | 14% |
| % TOTAL | 32% | 21% | 46% | | 64% | 21% | 18% | 25% | | 21% | 7% | 0% | 14% | | 14% | 4% | 4% | 7% | |

A = Agree
N = Neutral
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

## Table 2:   Question 2

| RESPONDENTS | | | | | 1-4 | | | | | 5-8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | A | N | D | % TOT | # | A | N | D | % TYP | # | A | N | D | % TYP | # | A | N | D | % TYP |
| xxx 20 | 9 | 3 | 8 | 71% | 14 | 5 | 3 | 6 | 70% | 4 | 3 | 0 | 1 | 20% | 2 | 1 | 0 | 1 | 10% |
| xxx 2 | 1 | 0 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx 4 | 2 | 0 | 2 | 14% | 2 | 1 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 25% | 1 | 1 | 0 | 0 | 25% |
| xxx 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0- | 0 | 0% |
| TOTAL 28 | 14 | 3 | 11 | 64% | 18 | 8 | 3 | 7 | 64% | 6 | 3 | 0 | 3 | 21% | 4 | 3 | 0 | 1 | 14% |
| % TOTAL | 50% | 11% | 39% | | 64% | 29% | 11% | 25% | | 21% | 11% | 0% | 11% | | 14% | 11% | 0% | 4% | |

A = Agree
N = Neutral
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

## Table 3:   Question 3

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | A | N | D | % TOT | # | A | N | D | % TYP | # | A | N | D | % TYP | # | A | N | D | % TYP |
| xxx  20 | 11 | 2 | 7 | 71% | 14 | 7 | 2 | 5 | 70% | 4 | 3 | 0 | 1 | 20% | 2 | 1 | 0 | 1 | 10% |
| xxx  2 | 0 | 0 | 2 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx  4 | 1 | 1 | 2 | 14% | 2 | 1 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 25% | 1 | 0 | 1 | 0 | 25% |
| xxx  2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL  28 | 14 | 3 | 11 | 64% | 18 | 10 | 2 | 6 | 64% | 6 | 3 | 0 | 3 | 21% | 4 | 1 | 1 | 2 | 14% |
| % TOTAL | 50% | 11% | 39% | | 64% | 36% | 7% | 21% | | 21% | 11% | 0% | 11% | | 14% | 4% | 4% | 7% | |

A = Agree
N = Neutral
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

## Table 4:  Question 4

| | RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | A | N | D | % TOT | # | A | N | D | % TYP | # | A | N | D | % TYP | # | A | N | D | % TYP |
| xxx | 20 | 10 | 2 | 8 | 71% | 14 | 7 | 2 | 5 | 70% | 4 | 2 | 0 | 2 | 20% | 2 | 1 | 0 | 1 | 10% |
| xxx | 2 | 0 | 1 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 1 | 0 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx | 4 | 2 | 0 | 2 | 14% | 2 | 1 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 25% | 1 | 1 | 0 | 0 | 25% |
| xxx | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 14 | 4 | 11 | 64% | 18 | 9 | 3 | 6 | 64% | 6 | 2 | 1 | 3 | 21% | 4 | 2 | 0 | 2 | 14% |
| % TOTAL | | 50% | 14% | 39% | | 64% | 32% | 11% | 21% | | 21% | 7% | 4% | 11% | | 14% | 7% | 0% | 7% | |

A = Agree
N = Neutral
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

## Table 5:   Question 5

| | RESPONDENTS | | | | | 1-4 | | | | | 5-8 | | | | | 9 + | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | A | N | D | % TOT | # | A | N | D | % TYP | # | A | N | D | % TYP | # | A | N | D | % TYP |
| xxx | 20 | 8 | 3 | 9 | 71% | 14 | 6 | 2 | 6 | 70% | 4 | 2 | 0 | 2 | 20% | 2 | 0 | 1 | 1 | 10% |
| xxx | 2 | 0 | 1 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 1 | 0 | 50% |
| xxx | 4 | 1 | 0 | 3 | 14% | 2 | 0 | 0 | 2 | 50% | 1 | 0 | 0 | 1 | 25% | 1 | 1 | 0 | 0 | 25% |
| xxx | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 11 | 5 | 13 | 64% | 18 | 7 | 3 | 8 | 64% | 6 | 2 | 0 | 4 | 21% | 4 | 1 | 2 | 1 | 14% |
| % TOTAL | | 39% | 18% | 46% | | 64% | 25% | 11% | 29% | | 21% | 7% | 0% | 14% | | 14% | 4% | 7% | 4% | |

A = Agree
N = Neutral
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

## Table 6:   Question 6

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | A | N | D | % TOT | # | A | N | D | % TYP | # | A | N | D | % TYP | # | A | N | D | % TYP |
| xxx | 18 | 8 | 2 | 8 | 67% | 12 | 5 | 2 | 5 | 67% | 4 | 2 | 0 | 2 | 22% | 2 | 1 | 0 | 1 | 11% |
| xxx | 2 | 0 | 0 | 2 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx | 5 | 1 | 0 | 4 | 19% | 2 | 0 | 0 | 2 | 40% | 2 | 0 | 0 | 2 | 40% | 1 | 1 | 0 | 0 | 20% |
| xxx | 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 27 | 11 | 2 | 14 | 59% | 16 | 7 | 2 | 7 | 59% | 7 | 2 | 0 | 5 | 26% | 4 | 2 | 0 | 2 | 15% |
| % TOTAL | | 41% | 7% | 52% | | 59% | 26% | 7% | 26% | | 26% | 7% | 0% | 19% | | 15% | 7% | 0% | 7% | |

A = Agree  
N = Neutral  
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

Table 7:   Question 7

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | A | N | D | % TOT | # | A | N | D | % TYP | # | A | N | D | % TYP | # | A | N | D | % TYP |
| xxx | 20 | 12 | 3 | 5 | 71% | 14 | 10 | 2 | 2 | 70% | 4 | 1 | 0 | 3 | 20% | 2 | 1 | 1 | 0 | 10% |
| xxx | 2 | 0 | 0 | 2 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx | 4 | 0 | 1 | 3 | 14% | 2 | 0 | 1 | 1 | 50% | 1 | 0 | 0 | 1 | 25% | 1 | 0 | 0 | 1 | 25% |
| xxx | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 14 | 5 | 10 | 64% | 18 | 11 | 4 | 3 | 64% | 6 | 1 | 0 | 5 | 21% | 4 | 1 | 1 | 2 | 14% |
| % TOTAL | | 50% | 18% | 36% | | 64% | 39% | 14% | 11% | | 21% | 4% | 0% | 18% | | 14% | 4% | 4% | 7% | |

A = Agree
N = Neutral
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

## Table 8:   Question 8

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | A | N | D | % TOT | # | A | N | D | % TYP | # | A | N | D | % TYP | # | A | N | D | % TYP |
| x x x | 19 | 17 | 0 | 2 | 70% | 13 | 12 | 0 | 1 | 68% | 4 | 3 | 0 | 1 | 21% | 2 | 2 | 0 | 0 | 11% |
| x x x | 2 | 2 | 0 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| x x x | 4 | 0 | 1 | 3 | 15% | 2 | 0 | 1 | 1 | 50% | 1 | 0 | 0 | 1 | 25% | 1 | 0 | 0 | 1 | 25% |
| x x x | 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 27 | 21 | 1 | 5 | 63% | 17 | 14 | 1 | 2 | 63% | 6 | 4 | 0 | 2 | 22% | 4 | 3 | 0 | 1 | 15% |
| % TOTAL | | 78% | 4% | 19% | | 63% | 52% | 4% | 7% | | 22% | 15% | 0% | 7% | | 15% | 11% | 0% | 4% | |

A = Agree  
N = Neutral  
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

Table 9:   Question 9

| RESPONDENTS | # | A | N | D | % TOT | 1-4 # | A | N | D | % TYP | 5-8 # | A | N | D | % TYP | 9 + # | A | N | D | % TYP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| x x x | 20 | 18 | 1 | 1 | 71% | 14 | 13 | 1 | 0 | 70% | 4 | 3 | 0 | 1 | 20% | 2 | 2 | 0 | 0 | 10% |
| x x x | 2 | 0 | 0 | 2 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 50% |
| x x x | 4 | 4 | 0 | 0 | 14% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 1 | 0 | 0 | 25% |
| x x x | 2 | 2 | 0 | 0. | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 24 | 1 | 3 | 64% | 18 | 17 | 1 | 0 | 64% | 6 | 4 | 0 | 2 | 21% | 4 | 3 | 0 | 1 | 14% |
| % TOTAL | | 86% | 4% | 11% | | 64% | 61% | 4% | 0% - | | 21% | 14% | 0% | 7% | | 14% | 11% | 0% | 4% | |

A = Agree
N = Neutral
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

## Table 10:   Question 10

| RESPONDENTS | | | | % TOT | 1-4 | | | | % TYP | 5-8 | | | | % TYP | 9 + | | | | % TYP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | A | N | D | | # | A | N | D | | # | A | N | D | | # | A | N | D | |
| x x x | 20 | 18 | 0 | 2 | 71% | 14 | 13 | 0 | 1 | 70% | 4 | 3 | 0 | 1 | 20% | 2 | 2 | 0 | 0 | 10% |
| x x x | 2 | 2 | 0 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| x x x | 4 | 2 | 2 | 0 | 14% | 2 | 1 | 1 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 0 | 1 | 0 | 25% |
| x x x | 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 24 | 2 | 2 | 64% | 18 | 16 | 1 | 1 | 64% | 6 | 5 | 0 | 1 | 21% | 4 | 3 | 1 | 0 | 14% |
| % TOTAL | | 86% | 7% | 7% | | 64% | 57% | 4% | 4% | | 21% | 18% | 0% | 4% | | 14% | 11% | 4% | 0% | |

A = Agree
N = Neutral
D = Disagree

# RESULTS OF USER PERCEPTION SURVEY

## Table 11:   Question 12

| RESPONDENTS | # | U | O | N | % TOT | 1-4 # | U | O | N | % TYP | 5-8 # | U | O | N | % TYP | 9+ # | U | O | N | % TYP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| xxx | 20 | 20 | 0 | 0 | 71% | 14 | 14 | 0 | 0 | 70% | 4 | 4 | 0 | 0 | 20% | 2 | 2 | 0 | 0 | 10% |
| xxx | 2 | 2 | 0 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx | 4 | 4 | 0 | 0 | 14% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 1 | 0 | 0 | 25% |
| xxx | 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 28 | 0 | 0 | 64% | 18 | 18 | 0 | 0 | 64% | 6 | 6 | 0 | 0 | 21% | 4 | 4 | 0 | 0 | 14% |
| % TOTAL | | 100% | 0% | 0% | | 64% | 64% | 0% | 0% | | 21% | 21% | 0% | 0% | | 14% | 14% | 0% | 0% | |

VOICE

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 12:   Question 12

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 18 | 1 | 1 | 71% | 14 | 14 | 0 | 0 | 70% | 4 | 2 | 1 | 1 | 20% | 2 | 2 | 0 | 0 | 10% |
| xxx | 2 | 1 | 0 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx | 4 | 3 | 1 | 0 | 14% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 0 | 1 | 0 | 25% |
| xxx | 2 | 2 | 0 | 1 | 7% | 2 | 1 | 0 | 1 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 24 | 2 | 3 | 64% | 18 | 17 | 0 | 1 | 64% | 6 | 3 | 1 | 2 | 21% | 4 | 3 | 1 | 0 | 14% |
| % TOTAL | | 86% | 7% | 11% | | 64% | 61% | 0% | 4% | | 21% | 11% | 4% | 7% | | 14% | 11% | 4% | 0% |

MEMO

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 13:   Question 12

| RESPONDENTS | # | U | S | N | % TOT | 1-4 # | U | S | N | % TYP | 5-8 # | U | S | N | % TYP | 9+ # | U | S | N | % TYP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| xxx | 20 | 9 | 8 | 3 | 71% | 14 | 7 | 5 | 2 | 70% | 4 | 2 | 2 | 0 | 20% | 2 | 0 | 1 | 1 | 10% |
| xxx | 2 | 1 | 0 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx | 4 | 3 | 1 | 0 | 14% | 2 | 1 | 1 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 1 | 0 | 0 | 25% |
| xxx | 2 | 2 | 0 | 1 | 7% | 2 | 1 | 0 | 1 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 15 | 9 | 5 | 64% | 18 | 9 | 6 | 3 | 64% | 6 | 3 | 2 | 1 | 21% | 4 | 2 | 1 | 1 | 14% |
| % TOTAL | | 54% | 32% | 18% | | 64% | 32% | 21% | 11% | | 21% | 11% | 7% | 4% | | 14% | 7% | 4% | 4% | |

INFORMAL

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 14:   Question 12

| | RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| x x x | 20 | 19 | 1 | 0 | 71% | 14 | 13 | 1 | 0 | 70% | 4 | 4 | 0 | 0 | 20% | 2 | 2 | 0 | 0 | 10% |
| x x x | 2 | 2 | 0 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| x x x | 4 | 4 | 0 | 0 | 14% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 1 | 0 | 0 | 25% |
| x x x | 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 27 | 1 | 0 | 64% | 18 | 17 | 1 | 0 | 64% | 6 | 6 | 0 | 0 | 21% | 4 | 4 | 0 | 0 | 14% |
| % TOTAL | | 96% | 4% | 0% | | 64% | 61% | 4% | 0% | | 21% | 21% | 0% | 0% | | 14% | 14% | 0% | 0% | |

SMALL

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 15:  Question 12

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 17 | 2 | 1 | 71% | 14 | 11 | 2 | 1 | 70% | 4 | 4 | 0 | 0 | 20% | 2 | 2 | 0 | 0 | 10% |
| xxx | 2 | 2 | 0 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx | 4 | 3 | 1 | 0 | 14% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 0 | 1 | 0 | 25% |
| xxx | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 24 | 4 | 1 | 64% | 18 | 14 | 3 | 1 | 64% | 6 | 6 | 0 | 0 | 21% | 4 | 3 | 1 | 0 | 14% |
| % TOTAL | | 86% | 14% | 4% | | 64% | 50% | 11% | 4% | | 21% | 21% | 0% | 0% | | 14% | 11% | 4% | 0% | |

LARGE

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 16:   Question 12

| | RESPONDENTS | | | | | 1-4 | | | | | 5-8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 11 | 5 | 4 | 69% | 14 | 9 | 4 | 1 | 70% | 4 | 1 | 0 | 3 | 20% | 2 | 1 | 1 | 0 | 10% |
| xxx | 2 | 1 | 0 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx | 5 | 1 | 0 | 4 | 17% | 2 | 0 | 0 | 2 | 40% | 2 | 0 | 0 | 2 | 40% | 1 | 1 | 0 | 0 | 20% |
| xxx | 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 29 | 15 | 5 | 9 | 62% | 18 | 11 | 4 | 3 | 62% | 7 | 2 | 0 | 5 | 24% | 4 | 2 | 1 | 1 | 14% |
| % TOTAL | | 52% | 17% | 31% | | 62% | 38% | 14% | 10% | | 24% | 7% | 0% | 17% | | 14% | 7% | 3% | 3% | |

WORK PRODUCTS

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 17:  Question 12

| | RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| x x x | 20 | 15 | 4 | 1 | 71% | 14 | 12 | 1 | 1 | 70% | 4 | 3 | 1 | 0 | 20% | 2 | 0 | 2 | 0 | 10% |
| x x x | 2 | 0 | 2 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 1 | 0 | 50% | 1 | 0 | 1 | 0 | 50% |
| x x x | 4 | 1 | 2 | 1 | 14% | 1 | 0 | 1 | 0 | 25% | 2 | 1 | 1 | 0 | 50% | 1 | 0 | 0 | 1 | 25% |
| x x x | 2 | 2 | 1 | 0 | 7% | ? | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 18 | 9 | 2 | 61% | 17 | 13 | 3 | 1 | 61% | 7 | 4 | 3 | 0 | 25% | 4 | 0 | 3 | 1 | 14% |
| % TOTAL | | 64% | 32% | 7% | | 61% | 46% | 11% | 4% | | 25% | 14% | 11% | 0% | | 14% | 0% | 11% | 4% | |

PUBLICATIONS

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 18:   Question 12

| | RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 7 | 8 | 5 | 74% | 14 | 5 | 6 | 3 | 70% | 4 | 2 | 0 | 2 | 20% | 2 | 0 | 2 | 0 | 10% |
| xxx | 2 | 0 | 1 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 1 | 0 | 50% |
| xxx | 3 | 1 | 2 | 2 | 11% | 0 | 1 | 0 | 1 | 0% | 2 | 0 | 2 | 0 | 67% | 1 | 0 | 0 | 1 | 33% |
| xxx | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 27 | 10 | 12 | 8 | 59% | 16 | 7 | 7 | 4 | 59% | 7 | 2 | 2 | 3 | 26% | 4 | 0 | 3 | 1 | 15% |
| % TOTAL | | 37% | 44% | 30% | | 59% | 26% | 26% | 15% | | 26% EMAIL | 7% | 7% | 11% | | 15% | 0% | 11% | 4% | |

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 19:  Question 12

| | RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 12 | 2 | 6 | 71% | 14 | 7 | 2 | 5 | 70% | 4 | 3 | 0 | 1 | 20% | 2 | 2 | 0 | 0 | 10% |
| xxx | 2 | 1 | 1 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 1 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx | 4 | 4 | 0 | 0 | 14% | 1 | 1 | 0 | 0 | 25% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% |
| xxx | 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 19 | 3 | 6 | 61% | 17 | 10 | 2 | 5 | 61% | 7 | 5 | 1 | 1 | 25% | 4 | 4 | 0 | 0 | 14% |
| % TOTAL | | 68% | 11% | 21% | | 61% | 36% | 7% | 18% | | 25% | 18% | 4% | 4% | | 14% | 14% | 0% | 0% | |

NEWSLETTERS

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 20:   Question 12

| | RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 4 | 5 | 11 | 71% | 14 | 3 | 4 | 7 | 70% | 4 | 1 | 0 | 3 | 20% | 2 | 0 | 1 | 1 | 10% |
| xxx | 2 | 1 | 0 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx | 4 | 0 | 2 | 2 | 14% | 1 | 0 | 0 | 1 | 25% | 2 | 0 | 1 | 1 | 50% | 1 | 0 | 1 | 0 | 25% |
| xxx | 2 | 2 | 0 | 1 | 7% | 2 | 1 | 0 | 1 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 7 | 7 | 15 | 61% | 17 | 4 | 4 | 9 | 61% | 7 | 1 | 1 | 5 | 25% | 4 | 1 | 2 | 1 | 14% |
| % TOTAL | | 25% | 25% | 54% | | | 61% | 14% | 14% | 32% | | 25% | 4% | 4% | 18% | | 14% | 4% | 7% | 4% |

LAN

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 21:   Question 13

| RESPONDENTS | # | U | O | N | % TOT | 1-4 # | U | O | N | % TYP | 5-8 # | U | O | N | % TYP | 9+ # | U | O | N | % TYP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| xxx | 20 | 20 | 0 | 0 | 71% | 14 | 14 | 0 | 0 | 70% | 4 | 4 | 0 | 0 | 20% | 2 | 2 | 0 | 0 | 10% |
| xxx | 2 | 1 | 1 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 1 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx | 4 | 4 | 0 | 0 | 14% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 1 | 0 | 0 | 25% |
| xxx | 2 | 2 | 0 | 0 | 7% | 2 | 2 | 0 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 27 | 1 | 0 | 64% | 18 | 18 | 0 | 0 | 64% | 6 | 5 | 1 | 0 | 21% | 4 | 4 | 0 | 0 | 14% |
| % TOTAL | | 96% | 4% | 0% | | | 64% | 64% | 0% | 0% | | 21% | 18% | 4% | 0% | | 14% | 14% | 0% | 0% |

VOICE

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 22:   Question 13

| | RESPONDENTS | | | | | 1-4 | | | | | 5-8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| x x x | 20 | 14 | 4 | 2 | 71% | 14 | 10 | 3 | 1 | 70% | 4 | 2 | 1 | 1 | 20% | 2 | 2 | 0 | 0 | 10% |
| x x x | 2 | 1 | 0 | 1 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 1 | 0 | 0 | 50% |
| x x x | 4 | 4 | 0 | 0 | 14% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 1 | 0 | 0 | 25% |
| x x x . | 2 | 2 | 0 | 1 | 7% | 2 | 1 | 0 | 1 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 21 | 4 | 4 | 64% | 18 | 13 | 3 | 2 | 64% | 6 | 3 | 1 | 2 | 21% | 4 | 4 | 0 | 0 | 14% |
| % TOTAL | | 75% | 14% | 14% | | | 64% | 46% | 11% | 7% | | 21% | 11% | 4% | 7% | | 14% | 14% | 0% | 0% |

MEMO

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

Table 23:   Question 13

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx 20 | 14 | 6 | 0 | 71% | 14 | 11 | 3 | 0 | 70% | 4 | 3 | 1 | 0 | 20% | 2 | 0 | 2 | 0 | 10% |
| xxx 2 | 2 | 0 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx 4 | 3 | 1 | 0 | 14% | 2 | 1 | 1 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 1 | 0 | 0 | 25% |
| xxx 2 | 2 | 0 | 1 | 7% | 2 | 1 | 0 | 1 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL 28 | 21 | 7 | 1 | 64% | 18 | 13 | 4 | 1 | 64% | 6 | 5 | 1 | 0 | 21% | 4 | 2 | 2 | 0 | 14% |
| % TOTAL | 75% | 25% | 4% | | 64% | 46% | 14% | 4% | | 21% | 18% | 4% | 0% | | 14% | 7% | 7% | 0% | |

INFORMAL

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 24:   Question 13

| | RESPONDENTS | | | | | 1-4 | | | | | 5-8 | | | | | 9+ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| x x x | 20 | 16 | 4 | 0 | 71% | 14 | 12 | 2 | 0 | 70% | 4 | 2 | 2 | 0 | 20% | 2 | 2 | 0 | 0 | 10% |
| x x x | 2 | 2 | 0 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| x x x | 4 | 4 | 0 | 0 | 14% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% | 1 | 1 | 0 | 0 | 25% |
| x x x | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 24 | 5 | 0 | 64% | 18 | 15 | 3 | 0 | 64% | 6 | 4 | 2 | 0 | 21% | 4 | 4 | 0 | 0 | 14% |
| % TOTAL | | 86% | 18% | 0% | | 64% | 54% | 11% | 0% | | 21% | 14% | 7% | 0% | | 14% | 14% | 0% | 0% | |

SMALL

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 25:   Question 13

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 17 | 2 | 1 | 71% | 14 | 12 | 2 | 0 | 70% | 4 | 3 | 0 | 1 | 20% | 2 | 2 | 0 | 0 | 10% |
| xxx | 2 | 2 | 0 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 50% |
| xxx | 4 | 1 | 2 | 1 | 14% | 2 | 1 | 0 | 1 | 50% | 1 | 0 | 1 | 0 | 25% | 1 | 0 | 1 | 0 | 25% |
| xxx | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 22 | 5 | 2 | 64% | 18 | 14 | 3 | 1 | 64% | 6 | 4 | 1 | 1 | 21% | 4 | 3 | 1 | 0 | 14% |
| % TOTAL | | 79% | 18% | 7% | | 64% | 50% | 11% | 4% | | 21% | 14% | 4% | 4% | | 14% | 11% | 4% | 0% | |

LARGE

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 26:   Question 13

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 10 | 6 | 4 | 69% | 14 | 8 | 5 | 1 | 70% | 4 | 1 | 0 | 3 | 20% | 2 | 1 | 1 | 0 | 10% |
| xxx | 3 | 0 | 3 | 0 | 10% | 0 | 0 | 0 | 0 | 0% | 2 | 0 | 2 | 0 | 67% | 1 | 0 | 1 | 0 | 33% |
| xxx | 4 | 1 | 1 | 2 | 14% | 1 | 0 | 0 | 1 | 25% | 2 | 1 | 1 | 0 | 50% | 1 | 0 | 0 | 1 | 25% |
| xxx | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 29 | 13 | 11 | 6 | 59% | 17 | 9 | 6 | 2 | 59% | 8 | 2 | 3 | 3 | 28% | 4 | 1 | 2 | 1 | 14% |
| % TOTAL | | 45% | 38% | 21% | | 59% | 31% | 21% | 7% | | 28% | 7% | 10% | 10% | | 14% | 3% | 7% | 3% | |

WORK PRODUCTS

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 27:   Question 13

| RESPONDENTS | # | U | S | N | % TOT | 1-4 # | U | S | N | % TYP | 5-8 # | U | S | N | % TYP | 9+ # | U | S | N | % TYP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| x x x | 20 | 13 | 6 | 1 | 71% | 14 | 10 | 4 | 0 | 70% | 4 | 2 | 1 | 1 | 20% | 2 | 1 | 1 | 0 | 10% |
| x x x | 2 | 1 | 1 | 0 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 1 | 0 | 0 | 50% | 1 | 0 | 1 | 0 | 50% |
| x x x | 4 | 1 | 2 | 1 | 14% | 1 | 0 | 1 | 0 | 25% | 2 | 1 | 1 | 0 | 50% | 1 | 0 | 0 | 1 | 25% |
| x x x | 2 | 2 | 1 | 0 | 7% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 17 | 10 | 2 | 61% | 17 | 11 | 6 | 0 | 61% | 7 | 4 | 2 | 1 | 25% | 4 | 1 | 2 | 1 | 14% |
| % TOTAL | | 61% | 36% | 7% | | 61% | 39% | 21% | 0% | | 25% | 14% | 7% | 4% | | 14% | 4% | 7% | 4% | |

PUBLICATIONS

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 28:   Question 13

| RESPONDENTS | # | U | S | N | % TOT | 1-4 # | U | S | N | % TYP | 5-8 # | U | S | N | % TYP | 9+ # | U | S | N | % TYP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| xxx | 19 | 10 | 3 | 6 | 73% | 13 | 8 | 1 | 4 | 68% | 4 | 1 | 1 | 2 | 21% | 2 | 1 | 1 | 0 | 11% |
| xxx | 2 | 0 | 0 | 2 | 8% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx | 3 | 3 | 1 | 1 | 12% | 0 | 1 | 0 | 1 | 0% | 2 | 1 | 1 | 0 | 67% | 1 | 1 | 0 | 0 | 33% |
| xxx | 2 | 2 | 1 | 0 | 8% | 2 | 1 | 1 | 0 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 26 | 15 | 5 | 9 | 58% | 15 | 10 | 2 | 5 | 58% | 7 | 2 | 2 | 3 | 27% | 4 | 2 | 1 | 1 | 15% |
| % TOTAL | | 58% | 19% | 35% | | | 58% | 38% | 8% | 19% | | 27% | 8% | 8% | 12% | | 15% | 8% | 4% | 4% |

EMAIL

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 29:   Question 13

| | RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx | 20 | 10 | 3 | 7 | 71% | 14 | 6 | 2 | 6 | 70% | 4 | 2 | 1 | 1 | 20% | 2 | 2 | 0 | 0 | 10% |
| xxx | 2 | 0 | 0 | 2 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx | 4 | 4 | 0 | 0 | 14% | 1 | 1 | 0 | 0 | 25% | 2 | 2 | 0 | 0 | 50% | 1 | 1 | 0 | 0 | 25% |
| xxx | 2 | 2 | 0 | 1 | 7% | 2 | 1 | 0 | 1 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL | 28 | 16 | 3 | 10 | 61% | 17 | 8 | 2 | 7 | 61% | 7 | 4 | 1 | 2 | 25% | 4 | 3 | 0 | 1 | 14% |
| % TOTAL | | 57% | 11% | 36% | | 61% | 29% | 7% | 25% | | 25% | 14% | 4% | 7% | | 14% | 11% | 0% | 4% | |

NEWSLETTERS

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

# RESULTS OF USER PERCEPTION SURVEY

## Table 30:   Question 13

| RESPONDENTS | | | | | 1 - 4 | | | | | 5 - 8 | | | | | 9 + | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | U | S | N | % TOT | # | U | S | N | % TYP | # | U | S | N | % TYP | # | U | S | N | % TYP |
| xxx 20 | 8 | 8 | 4 | 71% | 14 | 6 | 7 | 1 | 70% | 4 | 1 | 0 | 3 | 20% | 2 | 1 | 1 | 0 | 10% |
| xxx 2 | 0 | 0 | 2 | 7% | 0 | 0 | 0 | 0 | 0% | 1 | 0 | 0 | 1 | 50% | 1 | 0 | 0 | 1 | 50% |
| xxx 4 | 0 | 2 | 2 | 14% | 1 | 0 | 0 | 1 | 25% | 2 | 0 | 2 | 0 | 50% | 1 | 0 | 0 | 1 | 25% |
| xxx 2 | 2 | 0 | 1 | 7% | 2 | 1 | 0 | 1 | 100% | 0 | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0% |
| TOTAL 28 | 10 | 10 | 9 | 61% | 17 | 7 | 7 | 3 | 61% | 7 | 1 | 2 | 4 | 25% | 4 | 1 | 1 | 2 | 14% |
| % TOTAL | 36% | 36% | 32% | | 61% | 25% | 25% | 11% | | 25% | 4% | 7% | 14% | | 14% | 4% | 4% | 7% | |

U = Uses Frequently/Often
O = Uses Occasionally
N = Never Uses

**APPENDIX VI**

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