The California Department of Education commissioned a study to help guide ongoing information dissemination practices to the educational community. A pilot study, department of education staff interviews, and field interviews preceded document tracking. Phone interviews were conducted with district administrators, principals, and teachers statewide to track the actual information uses and effects of 15 representative department publications. Dissemination problems and their proposed solutions are described under the main headings of planning, targeting, timing, content, format, and marketing. Study findings suggested that the chief determinants of information use are organizational readiness, information sufficiency, and change incentives. The relationship between incentives and information use revealed "compliance" as the most powerful incentive for document use followed by "leverage," "support," and "hot issue." The conclusions of the study are that organizations disseminating information must do more than provide generalized recommendations. School personnel must be provided with essential and specific guidance and assistance that will help them to prepare for, plan, implement, and manage change. (MLF)
Improving Information Dissemination Impact on Districts and Schools

Stephen R. Mills

Introduction

Every year school districts are inundated with printed materials from state departments of education, education publishers, and various public and private organizations. The purpose of many of these printed materials is to encourage change to achieve improvement or excellence in education from state and local levels. The essential questions to guide their ongoing activities be improved to ensure our production and dissemination of education is to enhance the quality for achieving improvement or excellence in curriculum, instructional practices, learning arrangements, educational services, and school management practices. The study findings discussed here include: 1) six areas for improving the quality of information production and dissemination; 2) three determinants for understanding information use; and 3) four kinds of incentives for ensuring information use by districts and schools.

How the Study Was Conducted

The study was carried out in four overlapping phases:

Pilot study. Preliminary information was collected from California Department of Education staff through a written survey. At the same time, phone interviews were conducted with administrators and support staff in a few districts and schools to: 1) see how many of the proposed study questions could be answered immediately and easily, and 2) identify any differences between the intended purpose of documents and the ways that the documents were used, understood, and used by administrators and teachers in the field. These preliminary data were then used to help shape and focus the data collection strategies used in the remaining phases of the study.

Department of Education interviews. In-depth phone interviews were conducted with Department staff from various divisions and units about the purposes of both print and non-print information and the strategies and means used to produce and disseminate this information.

Field interviews. In-depth phone interviews were conducted with representative districts and schools on a statewide basis using a carefully devised sampling plan. District and building administrators and support staff were asked about the ways in which they received information from the Department of Education, the timeliness and quality of the information, and the kinds of information follow-up and support provided.

Information Problems and Proposed Solutions

The results of our in-depth interviews with Department of Education staff, district administrators, principals, and teachers statewide to track the actual information uses and impacts resulting from the dissemination of 15 representative Department publications. Documents selected for field tracking included program advisories, education materials catalogs, program planning handbooks, curriculum frameworks, instructional guides, quality control and compliance review manuals, school improvement reports, and education newsletters.

Planning

Problem: Department staff are often not aware of information production and dissemination activities in other parts of the organization. The information dissemination activities of units within the Department are uncoordinated...
nated and duplicate those of other units.

Solution #1: Publicize information production and dissemination activities within the Department. Provide work units with regular announcements about written documents in various stages of planning, production, and dissemination.

Solution #2: Use information production announcements to identify work units with related interests or concerns; form cooperatives among these units to coordinate dissemination activities and share production costs.

NOTE: We suggest using both solutions to reduce the information overload problem endured by districts and schools.

Targeting

Problem: Documents don't go directly to intended end users but are delayed or diverted as they pass through several levels of district hierarchy. Documents sent to district offices are susceptible to being lost, improperly screened and forwarded, or filed without forwarding to those who need them (especially personnel at the building level).

Solution #1: Include an easy to locate and consistent identifier (“advanced organizer”) in all documents indicating who the primary end user is by either job title, department, or program/project. This assists and saves time for district secretaries who must open mail and determine the most appropriate recipient(s).

Solution #2: When time is short, send documents directly to the primary end user(s); also send complimentary copies to any others suggested by district protocol. This alleviates delays caused by common district practice of successively routing a document through many people or chains-of-command before it arrives at the final user's desk.

CAUTION: Many district administrators don't like documents to be sent directly to schools without having been screened and approved, so use this strategy sparingly.

Solution #3: When mailing multiple copies of a document, decrease waste by sending fewer copies to small districts (where a few individuals wear many administrative hats) and more copies to larger districts (where more people need to see and review a document before action can be taken).

Timing

Problem: Districts and schools receive large numbers of print materials from outside organizations (especially the Department of Education); these documents are often received at times when personnel are too busy to read and discuss them, or when it is too late to respond effectively.

Solution #1: Query a representative sample of the intended audience to identify the best time(s) for them to receive a particular type of document. Do backward planning from the “receive date” to the beginning of document production to allow sufficient lead time for writing, editing (several revisions), internal review and approvals, printing, and mailing.

Solution #2: In a dissemination organization with a centralized production unit, form effective working relationships between work units and the production unit to ensure better preplanning and coordination of documents. Provide sufficient advanced notice to the production unit about document preparation requirements; discuss writing, editing, printing, and delivery due dates as well as possible delays. Make a binding agreement that: 1) requires the originating unit to provide a completed document of appropriate draft or finished quality, ready for editing or printing; and 2) requires the production unit to provide sufficient notice of production delays to allow the originating unit to use alternate means of getting the document out on time (e.g., in-house desktop publishing, use of an outside contractor).

Content

Problem: Documents don't contain information needed by the user to implement changes; they rhapsodize about what to do but don't say how to do it. Department of Education documents are typically designed for a wide rather than a specific audience which results in a lack of specificity needed by end users. Writing a general document creates considerable work for busy administrators who must summarize, translate, or supplement the information to make it useful to school staff. Because busy administrators are often unable or unwilling to prepare needed supplementary information, there is a decreased likelihood that useful information from the Department will reach principals and teachers at the building level. Worse than that, district personnel often assume that Department of Education documents are not intended for building-level people “because they don’t appear to be written for them” and, therefore, are not forwarded. The better tailored a document is to the particular needs and circumstances of the end user, the greater the chance the end user will receive it and the greater the chance the information it contains will actually be put to use. Tailoring information to end user needs means providing implementation ideas and strategies. As one director of instruction told us: “Don’t leave us hanging to invent the rest of the damn wheel!”

Solution #1: Write a document for a specific end user, rather than for a wide audience. If needed, write different versions of a document for different intended audiences (i.e., board members, district administrators, principals, teachers, parents). If separate versions are not practical, at least separate and label information in a document for specific readers (e.g., “What principals should know.” “What teachers should know”).

Solution #2: Suggest implementation strategies needed by the primary user that reflect the realities of school (e.g., tailoring or sequencing change activities for different curriculum areas or grade levels; organizing the school or classroom to promote the desired change; implementing instructional practices that address the new approach; and evaluating progress).

Solution #3: Suggest resource materials such as texts, planning guides, activities sheets, or videotapes. Make certain these resource recor-
recommendations are annotated so users can judge the content or quality of the materials for themselves. Cross-reference the document with other materials that may be helpful. For example, cross-reference a program planning handbook with skill levels described in a curriculum framework.

Solution #4: Provide examples of classroom activities that implement the change since this will increase the chances that the document will be passed on to teachers. If the primary users are school-level personnel, a document cannot be too concrete. If it lacks hands-on information, it risks being shelved or discarded. For example, documents advocating school improvement in specific areas are frequently put aside by district personnel because they lack practical information on curriculum materials, classroom organization, and exemplary program examples.

NOTE: Many excellent and highly useful curriculum and classroom level adaptations of Department of Education materials are always being developed by district and school personnel. These could be identified and cataloged by the Department or an independent organization and made available to schools and districts throughout the state.

Solution #5: Describe research findings that provide a link between past practices and what is currently being recommended, and that justify and substantiate the benefits of change. This will help to overcome resistance on the part of parents and teachers to "new" curriculum approaches or instructional strategies. For example, we found that some teacher resistance to a foreign language framework could have been avoided if the document had provided more detailed research explaining the weaknesses of a grammar-based curriculum versus the strengths of the recommended communication-based curriculum.

Solution #6: Identify exemplary districts, schools, or projects that have implemented the change or the new approach. This provides schools with a relatively inexpensive means of staff development by enabling administrators and teachers to visit and witness change activities for themselves and get advice from those who have first hand experience with a new practice.

Solution #7: Anticipate the concerns of various intermediaries (e.g., superintendents, district administrators, school board members, principals) who are likely to receive the information first then suggest ways for them to present the information to the end user in order to overcome resistance and foster support for change.

Solution #8: Identify common obstacles or difficulties encountered in implementing the suggested changes or new approaches. Provide honest examples of implementation failures and suggest possible ways to avoid them. This tells users, particularly beleaguered principals and teachers, that the Department of Education (or disseminating organization) understands the reality of the school and classroom environment and has realistic expectations of what change is possible and how long it will take.

Format

Problem: Documents lack "advanced organizers" to assist intermediaries in screening information for relevance, importance, or the most appropriate end user. The superintendent's secretary is the individual in the district office most often responsible for screening and routing documents to appropriate recipients. Most of the secretaries we interviewed told us it is difficult to tell without opening and reading a document what it covers, who specifically it should go to, and how important it is. As a result, documents forwarded to busy administrators may be discarded or thrown on the read-later pile (meaning the forgotten pile) unless the critical information that identifies the document's importance and use is easy to find, brief, and clearly written.

Solution #1: Locate screening information in a prominent place in a document using a consistent format. Screening information should include due dates or deadlines, and the intended primary recipient or end user of the document. For example, we were told by many district- and school-level personnel that they had missed application deadlines and workshops because of delays in routing information through the district, and that prominently displayed due dates would have expedited matters considerably.

Solution #2: State the main purpose or intended use of the document. State what can be learned from it.

Solution #3: Provide a brief overview or executive summary of the document's contents. State the main ideas and the essence of the topics covered.

Solution #4: Highlight new or updated information with margin flags or arrows, enclosed boxes, bold lettering, or different colors. Do this particularly for new information that changes or reverses (contradicts) old information provided in a previous document. This will save the busy administrator or teacher from having to read the entire document to determine what is new.

Solution #5: Highlight key and important information (whether new or not); use margin notes for easy-to-spot reminders of key points (e.g., hints, alerts, cautions). As before, this will save the busy administrator or teacher from having to read the entire document to see what value it has.

Solution #6: Include a table of contents and an index as warranted by the type, length, or complexity of the document. Use titles and labels that communicate readily what can be learned in each section of the document.

Solution #7: Identify a contact person within the Department of Education by name, address, and phone who can be reached for further information about the document. This is one of the easiest ways to publicize the unit responsible for the document, and to provide recipients with fast, reliable, and inexpensive document assistance and support. It is also a good way to get feedback about a document.
Marketing

Problem: Potential users are unaware of what documents are available, or who to call for information about available documents. When asked whether they were satisfied with the information they currently receive from the Department of Education, many district and school personnel had difficulty answering because they were not aware of what else they could or should be getting. Many were very interested in receiving documents once we informed them of their existence.

Solution #1: Develop a selected publications catalog that provides a brief annotation (purpose, primary user, content) for each available Department of Education document or for collective types of documents. This will help prospective purchasers to determine the content and value of Department documents and reduce their chances of making costly purchasing mistakes. It will also increase the likelihood that the catalog will be used as a resource reference by districts and schools.

Solution #2: Provide the field with a regularly updated list of previous and new Department of Education documents. Issue this update on a regular basis (e.g., bi-yearly) so the field will anticipate and expect it — we found that documents that were received on a regular basis tended to get more use.

Solution #3: Produce a concise (simplified) version of the Department of Education directory for the field. Such a directory was frequently requested by district and school administrators to help them identify people within the Department who have appropriate knowledge and expertise.

Solution #4: Ensure that instructional materials display centers located in county or district offices are on the mailing list of every unit within the Department, and are well stocked with representative documents and copies of the Department’s selected publications.

Information Uses in the Field

In examining the impact of the Department’s documents in the field, we were able to discern several key factors that determine if and to what extent information is used by districts and schools. These are now described.

On the basis of in-depth phone interviews with central office administrators, building principals, and teachers, nine types (or levels) of information use by districts and schools were identified. These fall on a continuum ranging from “not-seen” to “used” as summarized in Table One.

Of the 15 Department of Education documents that were tracked, 27 percent of the interviewees said they had “not seen” the documents, 13 percent said they had “not used” the documents, 11 percent said they had “forwarded” the documents to others, and 49 percent said they had “used” the documents in some way.

Respondent feedback from the general field and document tracking interviews suggested that the chief determinants of information use are organizational readiness, information sufficiency, and change incentives. Each of these is discussed below in more detail.

Organizational Readiness of Schools

Is there reasonable consensus on what action is needed and how it should be accomplished? Are administrators and teachers sufficiently motivated and willing to engage in the change effort? Are there sufficient supports and resources for undertaking the change?

From the standpoint of a Department of Education’s ability to exert influence for action or change in the field, organizational readiness is not a readily manipulable variable since it is largely determined by the characteristics of district or school personnel (attitudes, motivation) and by the availability of resources (money, time, materials). While such characteristics are difficult to control by a department of education, they can be influenced to some degree through the Department’s staff development and categorical funding programs.

Information Sufficiency

Do administrators and teachers have sufficient knowledge and skills to undertake action? Does the document or guidance material advocating change provide sufficient information needed by administrators and teachers to plan and implement action?

Unlike organizational readiness, information sufficiency can be directly influenced by the Department of Education in ways described previously under targeting, content, and format.

To assess this variable, we analyzed the adequacy of the 15 tracked documents by determining if they

<table>
<thead>
<tr>
<th>Code</th>
<th>Interview Response</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Doesn’t remember document.</td>
</tr>
<tr>
<td>1.5</td>
<td>Has never seen it, but knows it’s available.</td>
</tr>
<tr>
<td>2</td>
<td>Read and threw away.</td>
</tr>
<tr>
<td>3</td>
<td>Read and filed.</td>
</tr>
<tr>
<td>4</td>
<td>Forwarded the original, but did not keep a copy.</td>
</tr>
<tr>
<td>5</td>
<td>Forwarded an adapted version, but kept no copy.</td>
</tr>
<tr>
<td>6</td>
<td>Keeps on file and uses as a reference.</td>
</tr>
<tr>
<td>7</td>
<td>Used for meeting agenda (“for your information” only).</td>
</tr>
<tr>
<td>8</td>
<td>Used in planning change.</td>
</tr>
<tr>
<td>9</td>
<td>Used in implementing change.</td>
</tr>
</tbody>
</table>
contained sufficient information in three areas — targeting, content, and format. Relevant problem solution strategies proposed for each area were used as criteria to judge the information sufficiency of the documents. Only those solution strategies (i.e., criteria) considered appropriate to a document were used to judge its informational sufficiency. The results of this assessment revealed that the average number of sufficiency criteria satisfied by the tracked documents of Department branches were as follows: Field Services (77 percent), Specialized Programs (53 percent), Curriculum and Instruction (40 percent), Program Assistance (35 percent), Department Management (33 percent). Within each branch of the Department, there is room for improving the information sufficiency of its disseminated publications through application of appropriate “quality criteria” and recommended solution strategies.

**Change Incentives**

Are publications advocating action or change compelled or encouraged by any of the following incentives: compliance, leverage, support, or “hot issue”?

- **Compliance**: refers to information that conveys mandates of law or regulation.
- **Leverage**: refers to information that suggests standards or that conveys other information of an advisory nature.
- **Support**: refers to follow-up assistance and service provided for printed materials in any of the following ways: phone contacts, consultants, workshops, conferences, advisory groups, teleconferences, or computer networks.
- **Hot issue**: refers to information that addresses a currently popular or high concern issue in education, e.g., restructuring, authentic assessment, accountability, critical thinking, school financing.

These change incentives are well within the sphere of influence of a department of education to ensure information use as evidenced by the fact that we were able to associate one or more incentives with 13 of 15 tracked documents. (Incentives were “associated” on the basis of the survey and follow-up interviews with Department staff.) The results of our in-depth interviews with district administrators, principals, and teachers revealed that tracked documents that had no associated incentives were used by only 21 percent of interviewees, whereas documents that had one or more incentives were used by 25-78 percent of the interviewees. In short, the more incentives for information use and for change, the greater the impact in districts and schools.

The relationship between incentives and information use was plotted in Table Two. (The # numbers at the intersection points are the document numbers).

**NOTE**: For this table, the four incentives were weighted as follows: compliance = 4, leverage = 3, support = 2, hot issue = 1, no incentives = 0. The possible incentive weightings, therefore, ranged from 0 to 7, according to the total number of single or multiple incentives that were associated with each document (x-axis). The types of uses claimed by interviewees for each document were also weighted using the coded values 1-0 (y-axis) as given in Table One. The use weightings were then added and averaged in order to estimate the overall level of use for each document.

As can be clearly seen in Table Two, documents with two or three associated incentives got more
attention and action according to interviewees than documents with no incentives or only one incentive (the computed correlation [Pearson] between the two variables — incentives and types of use — was .79).

Conclusions

With respect to its "flagship" documents — those that advocate educational change to achieve improvement or excellence in curricula, instructional practices, learning arrangements, educational services, or school management — state departments of education (or any information disseminating organization) must do more than provide general philosophical perspectives and generalized recommendations. The organization must provide school personnel with more essential and specific guidance and assistance that will help them to prepare for, plan, implement, and manage change.

The bottom line is this: If departments of education don't include guidance information for change planning, implementation, and management in its major school improvement documents, it should be prepared to provide it in various ways in document support and follow-up assistance. Providing either guidance information or follow-up support or both can assure departments of seeing better use of its documents and, ultimately, better impact of its information dissemination in districts and schools.

As indicated from our interviews with Department of Education staff and with district and school administrators, failure to properly target documents to specific end users' needs or to ensure that documents reach intended end users can greatly retard the impact of the Department's information dissemination efforts. A department of education, therefore, must take particular care in targeting, formatting, and timing the dissemination of its documents (via mail, electronic, or other means) to ensure their getting into the hands of school personnel who are most likely to read them and to take action.

The most powerful incentive for document use a department of education can provide is compliance. However, since only a small percentage of a department's documents (e.g., about 20 percent in the case of California) are likely to have this type of incentive, it is essential that Department directors and managers try to ensure that information production and dissemination strategies utilize or take advantage of one or more of the remaining incentives — leverage, support, and hot issue. These latter incentives, particularly if utilized in various combinations, can provide powerful inducements to district and school personnel to use a department's documents in ways that can lead to effective actions for change. Furthermore, budgetary resources expended for print dissemination will have a more realistic hope of impacting the field and, thereby, will better justify the cost and effort involved.