The ERIC Clearinghouse on Teacher Education and the Lincoln, Nebraska, Public School System undertook a cooperative project to raise teachers' awareness and use of the ERIC databases. The report describes project background and planning, project execution, and evaluation. Suggestions for future replication are also provided. Appendices provide a demographic profile of Lincoln, objectives of the state capacity building project, pre- and posttest questionnaires, and samples of newsletter articles promoting the project. (MJB)
FINAL REPORT

SPECIAL PROJECT TO STUDY
ERIC POTENTIAL FOR IMPACT
ON SCHOOL DISTRICT PROBLEMS
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SPECIAL PROJECT TO STUDY ERIC POTENTIAL
FOR IMPACT ON SCHOOL DISTRICT PROBLEMS

by
The ERIC Clearinghouse on Teacher Education
and
The Lincoln (Nebraska) Public School System

Dr. Elizabeth Dillon-Peterson
Director of Staff Development
Lincoln Public Schools
Lincoln, Neb.

Dr. Karl Massanari, Director
Mr. Michael J. Butler, Assistant Director
ERIC Clearinghouse on Teacher Education
Washington, D.C.

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PROJECT BACKGROUND

The "Special Project to Study ERIC Potential for Impact on School District Problems," called "the Lincoln Project," originated in discussions by the Advisory Board of the ERIC Clearinghouse on Teacher Education in 1978. These discussions centered on ways in which the Clearinghouse might effectively respond to two kinds of needs:

1. Needs of the ERIC Clearinghouse on Teacher Education to study the system's potential to deliberately affect a local school district, and

2. Needs of local school district personnel who seek to become more data conscious in identifying and solving problems.

In addition, the Board discussed how the Clearinghouse might aid in Central ERIC's goals for promoting awareness and access to the system. One idea was for the Clearinghouse to develop some method of indepth intervention in one school district. Through such an intervention, it was believed that the Clearinghouse could:

---Systematically study how orientations and workshops about ERIC affect both awareness and use of the system;
---Determine what happens when a network is used to process teacher's requests for information;
---Ascertain if the information that teachers obtain from ERIC is useful and adequate; and
---Isolate and categorize information gaps detected when searching for answers to teachers' inquiries.

The Lincoln, Nebraska, school district was selected for this special project because of existing staff development and information referral networks (the latter consisted of media specialists in each of the district's forty-seven schools), and because of the Lincoln-based State of Nebraska Information Center for Educational Resources (SNICER), a state capacity building project that already was providing ERIC search services to local teachers. Another factor was the willingness of the District's staff development director to assist substantially in developing, executing, and evaluating the project. (Appendix A provides a demographic profile of the Lincoln school district and its staff development program.)

ERIC Objectives

From the general goals outlined for the Lincoln Project, the following four objectives were specified, and are addressed in this report:

1. Determine the degree to which the ERIC data base can be used in problem solving in a local school district;
2. Identify necessary conditions for effective use of the ERIC system in meeting school needs;
3. Determine the form in which retrieved information is most useful to practitioners; and
4. Identify information gaps in the ERIC data base.

Lincoln Objectives

The Lincoln Public School system (LPS) viewed the project as a chance to make a measurable impact on the whole school system in integrating theory into practice. To that end, LPS set forth the following objectives:

1. Orient all LPS staff members about the nature of ERIC and its capabilities;
2. Thoroughly expose school leaders, particularly librarians and media specialists, to the mechanics of using ERIC resources. This training would enable them to recognize situations where ERIC could be of service, to use ERIC reference books to locate information, to develop a system for applying the information retrieved, and to organize a system for communicating the information to appropriate staff.
3. Document the staff development process; and
4. Document application of the ERIC information,
Planning and development of the Lincoln Project took place: (a) during the Clearinghouse Advisory Board meeting of December 14-15, 1978; (b) through long-distance telephone conversations among Dr. Betty Dillon-Peterson, LPS director of staff development; Dr. Karl Massanari, Clearinghouse director, and John Waters, then Clearinghouse assistant director, during January through March 1979; and (c) in on-site work by Dr. Dillon-Peterson, her staff in the LPS Administration Building, and field-based teachers and administrators.

In the early stages of the Lincoln Project, the LPS contacted the State of Nebraska Information Center for Educational Resources (SNICER) about the proposed special project and the possibilities of working cooperatively. By the time of the project's approval, SNICER staff were the third party in a three-sided network of national information center, school district, and state information resource and referral service. (A description of the SNICER project is found in Appendix B.) Plans called for the Lincoln Project to be conducted on the following schedule:

**PHASE 1 (March 1979):** Administer pretest survey to all LPS staff members to determine knowledge about and use of ERIC.

**PHASE 2 (March 1979):** Orient all LPS staff members to the nature and capabilities of ERIC.

**PHASE 3 (April 1979):** Form a Leadership Planning Group of eight to twelve staff development leaders to identify needs and set priorities for the Lincoln Project. Include central office administrators (such as subject area consultants), special education consultants, building media staff members, in-house evaluators, teachers-staff developers, and building principals.

**PHASE 4 (June 1979):** Convene ERIC staff members and the Leadership Planning Group to review needs, conduct preliminary training in use of ERIC, select target audience for indepth training, and plan for implementation and monitoring of use.

**PHASE 5 (August 1979):** Develop a communication plan and train selected target audience of leaders.

**PHASE 6 (September 1979-March 1980):** Have local evaluators monitor use of ERIC after all training is completed and schedule quarterly visits from ERIC staff to assist and offer suggestions.

**PHASE 7 (March 1980):** Conduct a posttest and write a final report.
PROJECT EXECUTION

Implementation of Project activities closely followed the original outline. With a few modifications to account for variations in estimated costs and experience in conducting the activities, the Project was executed as follows:

PHASES 1 and 2. Pretest and Orientation.

In March 1979, pretests were administered to determine a baseline of prior knowledge and use of ERIC so that comparisons could be made at the end of the Project. First, all school administrators (approximately 30) responded to the questionnaire (see Appendix C) before being told about the Lincoln Project and viewing the videotape "ERIC--It's That Easy."

These administrators returned to their respective schools where they administered the questionnaires to all staff members during a regular staff meeting, explained the Project and LPS expectations (see Appendix D), showed the ERIC videotape, and solicited volunteers for a committee that would plan how best to implement the Project.

Of 2,200 staff members, 1,141 responded to the pretest, the results of which showed that 627 did not know what ERIC was, and 999 had never used it. Other results are given in Appendix E.

PHASE 3. Leadership Planning Group

In April, a cross-section of LPS staff members participated in a four-hour orientation and planning session. The group included two media administrators from the central office, two media specialists, one district evaluator, six elementary and secondary teachers who have part-time responsibility for staff development, one elementary school principal, one assistant junior high school principal, four central office subject-area consultants or program administrators, two state department representatives who work with SNICER, and five regular classroom teachers from elementary, junior high, and senior high schools. Initially this planning group was to be made up of eight people, but three times that many responded to the call for volunteers, and it was decided that the additional input would be valuable.

The agenda for the planning session included reports on the use of ERIC through the central media network of the district, a description of SNICER, and an explanation of the ERIC Clearinghouse on Teacher Education/LPS joint project. The group divided into small clusters to: (a) identify factors that could be used to determine priorities for searches, (b) identify ways to make search data more widely available through the district, (c) identify the numbers and types of individuals who should be involved in the indepth training/planning sessions, and (d) identify topics for searches during or immediately following training.
The recommendations of the Leadership Planning Group, which were subsequently adopted, were as follows:

- **Training/Planning Participants**—two staff members from each building, including the media director, will be invited to participate in an intensive inservice ERIC training project/planning program to be held June 25-29, 1979. These participants will be reimbursed for their time, if they are not on contract, for taking part in the workshop/planning session.

  Principals, administrators, consultants, coordinators, and other interested persons may participate on a voluntary, first-come basis, with professional growth credit being approved for all. If they request, members of the Leadership Planning Group will be included before others are given consideration.

  **Factors regarding priority for searches, in order of importance**—(a) related to district emphasis; (b) degree of practical applicability to classroom; (c) number of persons or schools requesting the topic, or who might use information; (d) number of previous searches on same or related topic; (e) searches that support teacher/administrator job targets; (f) number of previous searches done by the same individual or group.

  **Suggested topics for initial searches**—resources for new courses mandated for graduation; gifted programming (K-12 articulation, evaluation, staff development, reading); educational equity (sexism, racial differences, cultural awareness, handicapped).

  **Ways of communicating search contents**—(a) brief monthly annotated report in Focus (see Appendix F for samples); (b) more extensive summary reports prepared by the central LPS Administration Building Media Office (through which all searches would be routed) and circulated to all building media centers; (c) maintenance of a central file for searches; and (d) standardized reports by search initiators to the central media office on the usefulness of the searches.

**PHASE 4. Leadership Planning Group Training/Planning Session**

A leadership training/planning workshop was conducted June 25-29, 1979, by two ERIC/Teacher Education and two SNICER staff members in the LPS Administration Building Media Center. All media specialists and building principals were urged to attend, as they would provide the basis for further planning and for on-site execution of the Project.

The agenda for the workshop (see Appendix G) was designed to give the participants:

- an in-depth awareness of the ERIC system;
- information about networks within LPS, and between LPS, SNICER, and the ERIC Clearinghouse on Teacher Education;
- experience in skills and processes needed to conduct awareness-level
workshops for all instructional and administrative staff in their respective schools; and
-- instruction about LPS and ERIC requirements for recordkeeping and
evaluation of Project-related activities.

The ERIC awareness component of the workshop opened with brief
two-to-three minute computer searches on a variety of topics proposed by
workshop attendees. These searches, neither designed to be nor presented as
comprehensive, were intended to raise participant interest and to indicate the
vast breadth of materials in the data base. Past experiences of the workshop
presenters had indicated that this opening technique sustains interest during
the "drier" but essential sections on the organization and use of the various
ERIC tools, the second portion of the workshop.

This second session involved an intensive examination of the Thesaurus of
ERIC Descriptors, the Current Index to Journals in Education (CIJE), Resources
in Education (RIE), and other ERIC materials that are available locally. Each
participant was provided individual copies of the Thesaurus and RIE for use
during the workshop. In the case of CIJE, examples were taken from the
booklet *How to Use ERIC* and from handouts prepared by the Clearinghouse.

Because participants would probably be restricted in the future to
carrying manual searches or negotiating rather than performing computer
searches of the data base, a major part of the workshop was devoted to manual
search techniques. For this instruction, participants divided into four
groups led by SNICER and Clearinghouse staff. Each group took several
questions, identified descriptors from the Thesaurus, and found citations in
several issues of RIE.

In another session, participants checked their manual searches with
computer searches using the same Thesaurus descriptors. Citations were
examined to determine their relevance, and the searches were critiqued.

The groups also worked on developing strategies for computer searches.
Each group selected a search topic for this session on the negotiating skills
necessary for accurate transmission of requests from users to a search service
intermediary such as SNICER. In addition to examining each descriptor display
format in the Thesaurus, participants learned about the necessity of limiting
a search by age level, educational level, and other variables.

Descriptors were examined for appropriateness and for other conceptually
and hierarchically related terms. The concept of "identifiers" was explained
and, where appropriate, identifiers were included in the search strategy.
These sessions concluded with running the searches and examining the search
results.

The last part of the workshop was devoted to the expectations of the LPS
system and the Clearinghouse for continued activity by workshop participants.
These expectations, and the future planning which they involved, were as
follows:

1. If the participant was a building principal or central office staff
   member, to arrange a presentation to share with their colleagues the
procedures for conducting searches, and to encourage them to use the service.
2. If the participant was a media specialist, teacher, team leader, or coordinator, to arrange with his or her respective school principal and supervisors to share procedures for conducting searches.
3. To identify a personal need for which an ERIC search would be appropriate, conduct the search, and report by telephone to the central media office on the effectiveness of the information from the search.
4. To meet one or two times during the year to report informally and to make recommendations as the Project continues.
5. To be alert to any opportunities for encouraging others to use the service and to help them initiate the process, if necessary.

PHASE 5. Training of Administrative Personnel

Just before the opening of school, administrators were invited to participate in an abbreviated training session similar to that held for the planning group. Because administrative support was considered crucial to in-building promotion, the administrators also were advised of LPS and Clearinghouse expectations for the Project.

PHASE 6. Implementation and Monitoring of Processes

From August 1979 to January 25, 1980, the central media office coordinated and assisted with monitoring the Lincoln Project. Searches were initiated by teachers (often with the assistance of on-site media specialists), and funneled through the media office, which placed the order with SNICER. By this process, media office staff could monitor changes in use, nature of requests, and problems encountered by those doing the searches. The office also began to build a central file of searches performed. To keep all staff informed, the office made regular reports of the topics being searched, and, on occasion, clients were reminded that the search service was available.

The costs for searches performed during this phase were underwritten by the Clearinghouse through the NIE contract for the special project. Prior to, and subsequent to, the project, search costs were financed through the budget of the Lincoln Public School system.

PHASE 7. Posttest

In late May 1980, a short version of the pretest questionnaire will be administered to the entire LPS staff to determine any changes in level of awareness and use (see Appendix H). LPS will include these data in future planning and budgets, as well as share the information with ERIC/Teacher Education for dissemination through the ERIC system.
Can ERIC be used in problem solving at the local school district level? Judging from the impressive Project statistics compiled from August 1979 through January 25, 1980, the answer is yes. Compared with the preceding ten months, use of ERIC jumped from 37 to 262 completed searches, and 58 searches still being processed. And, most of the searches were conducted by classroom teachers.

While use of ERIC may well have been affected by the fact that outside funds were available for a short time to underwrite search costs, these data tend to indicate that given awareness of and access to ERIC, both teachers and non-teaching staff can and will use this resource. Of the searches ordered, ten percent were to be used for administrative planning and policy development, 14 percent for curriculum development, and 61 percent for classroom instruction (both content and method). The remaining percentage was split among program planning (6), development (5), and evaluation (1).

The following description of Project results is taken verbatim from the evaluation report submitted to the Clearinghouse by the Educational Service Unit #18, State of Nebraska, William T. Workman, administrator.

METHODS

Two methods of data collection were used. Records kept by central office media center staff were examined to determine the number of ERIC searches initiated during the project and the length of time between initiating and receiving searches.

A second method involved interviewing a random sample of users who had initiated and received one or more searches during the project. Interview questions were designed to obtain information relevant to the ERIC objectives. A copy of the interview questions is included in Appendix I.

A sample of fifty ERIC users was drawn from the list of users who had initiated and received searches between June 1, 1979, and January 26, 1980. The sample was stratified by position, resulting in the identification of four groups of participants: elementary teachers, secondary teachers, building administrators, and central office administrators. All fifty individuals selected for the survey were contacted and telephone interviews were completed with forty-two of them. The sample of participants interviewed included ten elementary teachers, twelve secondary teachers, ten building administrators, and ten central office administrators. There were no significant differences between the responses of the four groups on any of the sixteen items. Therefore, no distinction was made between these four groups in summarizing the results.
questions showed no significant differences between responses of participants judged to have made substantial use of ERIC services and responses of all other ERIC users. Therefore, the classification factor was not applied in summarizing results of the interviews.

RESULTS

Responses to interview questions and data from media center records were categorized by objective for purpose of analysis. Results reported in the following paragraphs include information relevant to each objective.

ERIC Objective 1: Determine to what degree it is possible for the ERIC data base to be used in problem solving at the local school district level.

During the life of the project (June 1, 1979-January 31, 1980) a total of 320 searches were initiated by 200 staff members in Lincoln Public Schools.

Forty-two participants were interviewed concerning the usefulness of the ERIC system. Thirty-eight or 90.5 percent indicated that the ERIC searches they initiated were useful to them in obtaining information for their jobs (such as program planning, curriculum development, classroom instruction, and problem solving).

Respondents also specified ways in which they used the information obtained in the searches. The uses most frequently mentioned are listed below:

1. Planning classroom instruction
2. Preparing in-service activities
3. Developing curricular materials
4. Preparing documentation for grant proposals
5. Sharing resource information with others (students, parents, teachers, Board of Education)

Forty (95.2 percent) of the participants surveyed said they plan to use ERIC again. Thirty-seven (88.1 percent) said they would use ERIC again if the cost of the service were deducted from building instructional funds. Thirty-one respondents (73.8 percent) indicated they would use ERIC again if they had to pay for searches themselves because school district funds were not available. Thirty-eight participants (90.5 percent) said that money should be allocated by the district to finance ERIC searches. However, twelve of those respondents qualified their answers by saying searches financed by the district should be related to district and/or building instructional goals.
ERIC Objective 2: Identify necessary and sufficient conditions for effective use of the ERIC system in meeting school district needs/solving school district problems.

Records were kept on the dates searches were initiated and the dates they were received. During the Project, the average length of time between date of the request and date the search was received was twenty-five days. The turnaround time for searches received to date ranged from ten days to forty-two days.

Participants interviewed responded to questions concerning problems they had in using the ERIC system. Thirty-seven of the respondents (88.1 percent) said that the ERIC searches included the general information they were expecting. However, ten (23.8 percent) indicated that the information provided through the ERIC database was not complete enough to answer their questions. Nine of the ten participants who said the information they received was not complete are administrators (four building and five central office administrators). The difference between responses of teachers and administrators to the question concerning completeness of the information received is statistically significant (p < .01). One possible explanation for the difference between teachers and administrators is that the kinds of questions asked by the two groups may have been different.

Eight of the respondents (19.0 percent) said that they had some difficulty in formulating questions for their searches. However, they also mentioned receiving valuable help in delineating their topics from the staff media specialist. Eight respondents stated they had some difficulties using the information provided in the searches. The problem mentioned most frequently was the lack of availability of microfiche readers. Twenty-one of the respondents said that microfiche was inconvenient to use because of the necessity of borrowing readers. Other problems mentioned were the delay between the time the search was initiated and the information was received, and the large quantity of data included in the search.

ERIC Objective 3: Determine in what form retrieved information is most useful to practitioners.

Information provided in searches were in three forms—computer printouts, paper copies of journal articles, and microfiche. Half the surveyed participants said that microfiche was particularly inconvenient to use. No respondents mentioned any difficulties in using computer printouts or paper copies of journal articles.

ERIC Objective 4: Identify gaps in the data base for problem solving at the local school level.

Participants interviewed responded to questions about the ERIC database. Thirty-seven respondents (88.1 percent) said that the
searches they initiated included the information they expected. Twenty-nine (69.0 percent) said that the information provided through the ERIC data base was complete enough to answer their questions.

In general, participants indicated little awareness of the possibility of contributing resource materials to ERIC for inclusion in the data base. Only three (7.1 percent) of the people interviewed had previously submitted resource materials to ERIC. However, thirteen (31.0 percent) of the respondents said they have developed resource materials that they would be willing to submit for inclusion in the data base. Eleven people (26.2 percent) said they knew of additional resource materials that could be included in the ERIC data base.

CONCLUSION

This evaluation of the cooperative Lincoln Public Schools/ERIC project was organized around four objectives relative to the potential impact of the ERIC system on the local school district.

The evaluation design included analysis of information available from records kept by central office media staff and from a series of forty-two telephone interviews conducted during February 1980. The results indicate that it is possible for the ERIC data base to be used in problem solving at the local school district level (Objective 1); the major barrier to the effective use of the ERIC system is the time delay between the date the search is initiated and the time the results of the search are available (Objective 2); hard copy feedback (computer printouts, copies of journal articles) is more convenient to use than microfiche (Objective 3); and no obvious gaps in the ERIC data base have been identified (Objective 4). (Willeke, Marjorie J., and Novak, Carl D. "Study of ERIC Potential for Impact on School District Problems: A Staff Development Project." Lincoln, Neb.: Educational Service Unit 18, February, 1980)

Answers to objective four, the identification of gaps in the ERIC data base, as well as answers to the Lincoln objectives await responses to the late spring survey of teachers. Results of these surveys will be reported to the LPS administration and to the Clearinghouse to make it possible to improve use of the system at both locations.
A MODEL FOR REPLICATION

From the experiences gained in the Lincoln Project, a model can be constructed for full or partial replication that could be effective with minimum expenditures by any school or school district.

Several conditions are requisite for successful replication, among them the involvement of teachers in planning. Input from this audience, to whom awareness and access efforts are directed, about goals, timing, and processes should be sought during all stages, not just the evaluation stage.

A supportive and informed administration, such as that in Lincoln, is another prerequisite. The success of the Lincoln Project was largely dependent on the administration's willingness to allow release time for Project meetings and planning sessions, for time spent in staff meetings, and for monetary support. Hence, time spent to raise the awareness level of administrators is time well-spent.

One reason for selecting the Nebraska site for this special project was the existing strong network of media specialists linked to a central media office. This system provided an accessible location for the workshops which were attended by virtually every media specialist in the district. In places where such a network does not exist, the same effect might be obtained by an ad hoc gathering of district librarians and media specialists for training and orientation, but the concept of a linkage for gathering and sharing information must be in place.

Again in Lincoln, funds were available for the "importation" of outside advisors—staff members from the Clearinghouse on Teacher Education—who conducted the leadership training workshops. In retrospect, the abilities of the SNICER staff (the state capacity building project) to perform the tasks assumed by ERIC/Teacher Education cannot be doubted. In this case, SNICER was a local resource, but such could probably be found in most regions to take on a training role. Among these resources are local ERIC Clearinghouses, individual state capacity building projects, experts on educational resources and their use from state departments of education as well as from local ERIC search services, and K-12 or, more likely, higher education librarians who have had extensive experience in working with ERIC.

The costs involved in training materials were quite low in the Lincoln Project and could be held at that level or reduced in a replication. Major expenditures for the workshops, aside from staff release time, were for duplicating handouts for workshop participants.

Non-contract participants were remunerated for participating in the summer training-planning workshops. This cost could be avoided by scheduling the workshops during the regular school year rather than summer vacation, a feat that could be accomplished if participants were released from regular duties. Although probably less effective, another method might be to offer
the workshops during evenings or on Saturdays during the school year, or as a part of a local teacher center inservice program.

Through a combination of incentives and effective training techniques, a group can be assembled at a reasonable cost to develop an in-depth working knowledge of the ERIC system and its potential. One important incentive in the Lincoln Project seemed to be the granting of professional growth credit for attendance at ERIC training workshops. Another motivator was apparent in a frequently expressed sentiment of Lincoln teachers that the success of this experiment was due to the resource personnel at the building level who could take questions and problems, turn them into ERIC-searchable questions, and negotiate with search-service organizations to gather the resources.

The awareness level of individual teachers is another necessary target of any replication. The necessity for raising awareness of the existence and usefulness of the ERIC data base was made clear in the results of the LPS teacher survey before the videotape showing. The development of ERIC skills among building librarians and media specialists would be wasted if a basic awareness of the system's existence was not promoted concurrently among instructional and administrative staff.

Awareness-level training might be accomplished in a number of ways, depending on whether a district-level or individual building-level approach is taken. For a district, short mini-workshops might be undertaken, perhaps in concert with the local teachers' center; articles might be written for a district staff newsletter; or a traveling exhibit might be developed. For the individual school, bulletin board displays might be mounted in the teachers' lounge, articles in building newsletters or announcement sheets might be published, and videotape or overhead projection programs might be arranged for lunch time, early morning, or afternoon presentations. In addition, the school librarian/media specialist must be willing and able to keep the name of ERIC visible so that whenever a school problem arises, ERIC will come to mind as a resource. This last is probably the most effective and most necessary promotional activity.

Links with local ERIC collections and a local ERIC search service are other obvious needs in replicating the Lincoln Project. More than 700 locations now house ERIC microfiche collections, and many more locations purchase and make available Resources in Education and Current Index to Journals in Education. Many search services provide reduced rates or free searches to the populations that they serve (for example, state departments of education and county or district education services to the school teachers in their areas). The ERIC Processing and Reference Facility, 4833 Rugby Ave., Suite 303, Bethesda, MD 20014, has available in limited quantities free listings of ERIC microfiche collections and search services.

Alternate sources of funds would have to be developed as substitutes for the federal support of search costs provided to Lincoln Project. Most school districts have funds available for staff development and library services which could be used for this purpose. In addition, an emphasis on manual searching by library staff with wide dissemination of the responses to individual information requests would reduce the dollar outlay for searching. Sources of reduced fee or free searching would also have to be investigated.
Possible Variations for Future Projects

The involvement of institutions of higher education (IHEs) in a Lincoln-type project seems to have great potential, as the benefits of IHE participation in local staff development activities have been well-documented. These institutions, with their resources and years of work in education, could replace one side of the Lincoln triangle: the national information center (ERIC/Teacher Education). In addition to being a local repository of the ERIC collection in many cases, IHE instructional staff can provide problem-specific syntheses of ERIC materials before they are delivered from the search service to the teacher. Involvement of an IHE would also provide opportunities for college and university faculty development and for the upgrading of professional education courses. IHEs also are potential deliverers of inservice workshops, symposia, and classes.

Another possible change to the basic structure of the Lincoln Project is a focus from individual teacher concerns to larger audiences, either groups of teachers or entire building staffs expressing similar needs. The grouping of needs could result in smaller expenditures for a larger number of information requestors.

Other changes in the basic plan may be necessary or desirable to account for varying conditions that affect needs and resources in individual schools.
SUMMARY

From the evidence to date, it seems clear that the collaboration of the Lincoln Public School District and the ERIC Clearinghouse on Teacher Education on this special project has resulted in benefits to both. Although the final results from Lincoln are not in, the exercise has:

--raised the awareness of the entire school district instructional and administrative staff about the existence of ERIC;

--provided to the district a cadre of school-based staff capable of negotiating searches and transmitting them rapidly to an information search service;

--strengthened the network of school-based media centers and central media center staff;

--multiplied seven-fold the use of ERIC over a six-month period;

--gathered important information on teacher awareness and use of ERIC;

--improved the abilities of the ERIC system to effectively address the needs and concerns of the nation's schoolteachers and media specialists.

Further results of the Lincoln Project will emerge from the post-project questionnaire and interpretation of responses as they relate to the four Lincoln objectives and the ERIC concern about gaps in the data base. Periodic monitoring of ERIC use over the coming years will be done informally to observe whether such use rises, falls, or remains steady. An interesting study, but one that is far beyond the scope of this project, would be to determine if changes in instruction or administrative policy attributable to information from an ERIC search has any effect on the academic standing or behavioral patterns of the Lincoln Public School students.
APPENDIX A

DEMOGRAPHIC PROFILE OF LINCOLN, NEBRASKA, AND OVERVIEW OF STAFF DEVELOPMENT ACTIVITIES
APPENDIX A

DEMOGRAPHIC PROFILE OF LINCOLN, NEBRASKA, AND OVERVIEW OF STAFF DEVELOPMENT ACTIVITIES

District Description

Lincoln is a city of 175,000 located in eastern Nebraska. The state's capital and second largest city, it is situated 200 miles from Kansas City and 500 miles from Denver and Chicago. The level of education in the population is relatively high, and there is a less than five percent minority population, predominantly Black.

Government, education, insurance, and light industry are the major sources of employment. One out of every four persons on the labor force is on the payroll of local, state, or federal government. The University of Nebraska-Lincoln, Nebraska Wesleyan University, and Union College are located in the city.

The entire city, a 46-square-mile-area, falls within the Lincoln Public School District. Over 26,000 full-time students attend the Lincoln Public Schools. They are enrolled in thirty-three elementary schools, eight junior high schools, three senior high schools, one combination junior-senior high school and one small alternative school intended to provide for the needs of junior and senior high school students who are unable to adjust to the regular school program.

More than 1,500 certified staff members, 800 classified employees, and 250 aides work with these students. Of these employees, 200 are certified special education teachers, administrators, aides, or other classified personnel. This number has grown from 80 in the past ten years.

The Lincoln Public Schools operate according to a decentralized management philosophy, with the district office providing student objectives, guidelines, parameters, and occasionally directives. Within these limitations, local building administrators and their advisory committees have great latitude in staffing and programming, as well as in material selection and purchase.

The line of authority runs from the superintendent's cabinet, made up of ten key administrators in the central office (including the director of staff development), to an administrative council made up of all administrators within the district. At the monthly meetings of this council, administrators assist the superintendent in the formulation of policy and operational guidelines. In addition, principals at the elementary, junior high, and senior high levels meet separately each month with the superintendent to deal with matters more directly related to their particular assignments. Each building administrator and central office director or subject area consultant has an advisory committee made up of a cross-section of teachers, department
The school district places much emphasis on effective planning for specific program improvement. Each January, central office administrators (particularly subject area consultants) describe what they perceive to be their staff development and/or curriculum improvement needs for the following three years. Each year, these projections are updated to reflect any changes. The superintendent's cabinet also declares districtwide areas of emphasis.

These program improvement plans are made known to the building principals and their staffs who then develop their own program improvement plans, including collaborative efforts with central office personnel where appropriate. The staff development budget is allocated to the schools according to the plans approved by the associate superintendent for instruction and the director of staff development. Expenditures are monitored through the staff development office.

The Lincoln Public Schools are not beleaguered in the sense that many other city school districts are at present. The community is constantly supportive of the educational program and relatively uncritical. The budget has not been under serious attack by the citizenry, and the state recently defeated a constitutional amendment for a "lid bill" that would have seriously constrained local efforts to provide quality education for Lincoln's students.

While achievement scores follow somewhat the same patterns as national scores, Lincoln's have been and remain consistently above the national average, and are, in fact, improving their relative position.

The Lincoln Public Schools have a history of successful collaboration with other education agencies or groups. The superintendent's cabinet has met regularly with the Teachers College cabinet from the University of Nebraska-Lincoln to identify and work on mutual problems, and the district is involved in a cooperative effort with the University Council for Educational Administration.

Staff Development Program

The Lincoln Staff Development Program, which was initiated in 1969, is an integral part of the district's program improvement efforts. It is administered by the director of staff development and is a part of the division of instruction. The office has no permanent staff other than the director and a secretary, but many individuals within the system take responsibility for the program in a variety of ways.

Subject area consultants head curriculum studies and conduct appropriate staff development activities to support and improve current curriculum and to implement new curriculum.
A large cadre of staff developers—teachers works on temporary assignment or on extra assignment to provide inservice training for colleagues.

A number of building principals and other central office administrators, such as those in special education, provide inservice training for fellow administrators or for other staff members on a variety of topics of current concern.

The Superintendent of Schools has exhibited a consistent, long-term commitment to staff development and its importance to an effective educational program. The current budget allocation from local district monies is as substantial as any known to district staff.
APPENDIX B

OBJECTIVES OF SNICER--THE NEBRASKA STATE CAPACITY BUILDING PROJECT
The State of Nebraska Information Center for Educational Resources (SNICER) has as its purposes: (1) to establish and maintain a program that systematically provides technical information to educators in the state of Nebraska; (2) to coordinate information activities within Nebraska; and (3) to provide the necessary links between local schools and information resources to make educational research more effective in promoting the improvement of school practice. These purposes are accomplished through promoting the use of information resources by Nebraskans in making education-related decisions; through providing rapid access, review, and use of information to educators; through training state and local educators in information use; and through coordinating various information resources and activities statewide so that services are efficient and not duplicated. Three kinds of procedures are used: (1) coordination of information sharing through SNICER by its establishment as a recognized "point of control" for education-related information requests. (These requests are either responded to directly or through an expert in the topic area); (2) assistance to both internal and external providers of information in meeting users' needs (Training at the awareness level is provided to both users and managers of educational information; workshops are held across the state to improve the understanding of education-related information systems, their resources, access systems, and the ways in which they can be employed); and (3) support of information users and providers through the expansion of the array of accessible resources, and the development of efficient systems to acquire, evaluate, and convey information.
APPENDIX C

PRETEST QUESTIONNAIRE
Lincoln Nebraska Questionnaire

I. What is your staff position? ________________________________

II. A. Have you ever used ERIC in obtaining information for use in our job (such as program planning, curriculum development, classroom instruction, problem solving) rather than for more personal use (such as career advancement, theses writing)? YES ____ NO ____

1. If yes, have you used it more than once? YES ____ NO ____
   If no, why not? _____________________________________________

2. If you have used ERIC, how did you go about getting information?
   a. through Local Education Association contact (LEA) ______
   b. through State Education Association contact (SEA) ______
   c. through Teacher Center contact ______
   d. through an ERIC Clearinghouse ______
   e. through direct personal research ______

3. If you have not used ERIC, was this due to any of the following?
   a. don't know what ERIC is ______
   b. don't know of any access points ______
   c. no school-provided funds ______
   d. any other particular reasons ______

III. If you have used ERIC, was the information useful to you? YES ____ NO ____
     If no, explain briefly why not? _______________________________

IV. If you have used ERIC, what form did the information use take?
   A. personal manual search of Resources in Education (RIE) ______
      of Current Index to Journals in Education (CIJE) ______
   B. manual search, by others, of RIE ______
      of CIJE ______
   C. computer search of RIE ______
      of CIJE ______

V. If you have used ERIC, briefly note:
   A. its strengths (in relation to your particular information need/problem) ____________________________________________
   B. its weakness (in relation to your particular information need/problem) ____________________________________________
Dear Media Center Director:

We would appreciate your answering the following questions as part of an investigation into the usefulness of the Educational Resources Information Center (ERIC) in helping to solve local school system problems. We plan on sending a follow-up questionnaire in late December 1979 to chart any changes which have occurred in ERIC use which may be attributable to this series of workshops and to the increased exposure the classroom teachers in your system will have to ERIC over the coming months. If you are willing to participate in the follow-up study, please fill in your name, title, and mailing address in the space provided.

1. How large is your media center staff? Full-time: ____; Part-time: ____

2. Which of the following are in your media center collection:
   - [ ] films
   - [ ] film strips
   - [ ] slides
   - [ ] books
   - [ ] newspapers
   - [ ] periodicals
   - [ ] microfiche
   - [ ] microfiche readers
   - [ ] microfiche reader/printers
   - [ ] Resources in Education
   - [ ] Current Index to Journals in Education
   - [ ] computer terminals
   - [ ] other (please specify: ____)

3. Approximately how many requests for information do you receive per week? ____

4. Of these questions, what estimated percentage are in reference to:
   - [ ] need for curriculum materials
   - [ ] program improvement
   - [ ] administrative problems
   - [ ] preparation of speech, report, article
   - [ ] classroom materials
   - [ ] research project
   - [ ] teacher-centered career development
   - [ ] browsing
   - [ ] current awareness
   - [ ] assignments and term papers
   - [ ] other (please specify: ____)
   - [ ] preparation or updating of course bibliographies
   - [ ] other (please specify: ____)

5. In order of frequency, what sources do you most use to answer client questions:
   - [ ] journals/periodicals
   - [ ] dictionaries
   - [ ] encyclopedias
   - [ ] textbooks
   - [ ] microfiche
   - [ ] verticle files
   - [ ] ERIC materials
   - [ ] other reference works
   - [ ] other (please specify: ____)


6. Which of the following have you used in providing information to your clients, and with what frequency:

- Dissertation Abstracts
- Education Index
- Psychological Abstracts
- Sociological Abstracts
- Reader's Guide
- Magazine Index
- New York Times Index
- Resources in Education
- Current Index to Journals in Education
- ERIC microfiche

often          occasionally   rarely       never

7. Please estimate the number of people using the following in a typical month:

- Dissertation Abstracts
- Education Index
- Psychological Abstracts
- Sociological Abstracts
- Reader's Guide
- Magazine Index
- New York Times Index
- Resources in Education
- Current Index to Journals in Education
- ERIC microfiche

8. How does ERIC compare in usefulness to other such indexes you have used:

- less useful
- equally useful
- more useful

9. What has been your client response to information obtained from ERIC:

- generally unfavorable
- generally favorable
- uniformly favorable

Comments:

10. Please estimate the number of people in each category served by your center in a typical week:

- teachers
- administrators
- support staff
- parents
- students
- others

11. Do you publicize the availability of ERIC to your clients? ___ yes; ___ no

What form does this publicity take: ___ displays; ___ general orientations/workshops; ___ fliers; ___ columns in school newspapers; ___ work-of-mouth; ___ other (please specify: [

Would you be willing to complete a follow-up questionnaire in late December? If so, please complete the following:

Name: ________________________________
Title: ________________________________
Mailing Address: ____________________
APPENDIX D

LPS EXPECTATIONS FOR PARTICIPANTS
ERIC PROJECT

EXPECTATIONS FOR PARTICIPANTS

1. If you are a building principal or central office staff member, arrange for a presentation with the group or groups you deal, with most directly to share the procedures for conducting searches, and encourage them to use this service.

2. If you are a media specialist, teacher, team leader, coordinator, arrange with your principal or supervisor to present procedures for conducting searches to your colleagues and encourage them to use this service.

3. Identify a personal need for which an ERIC search might be appropriate, conduct the search, report by telephone to Dr. Clara Rottmann, the effectiveness of the information gained as a result.

4. Meet 1-2 times informally during the year to report and make recommendations as the project continues.

5. Be alert to informal opportunities to encourage others to use the service and be willing to help them initiate the process, if necessary.

Betty Dillon-Peterson
Staff Development Office
APPENDIX E

SUMMARY OF PRETEST RESPONSES
Lincoln Nebraska Questionnaire

I. What is your staff position?

II. A. Have you ever used ERIC in obtaining information for use in our job (such as program planning, curriculum development, classroom instruction, problem solving) rather than for more personal use (such as career advancement, theses writing)?  YES 142/12% NO 999/88%
   1. If yes, have you used it more than once? yes 105/75% no 35/25%
   If no, why not?

   2. If you have used ERIC, how did you go about getting information?
      a. through Local Education Association contact (LEA) 10
      b. through State Education Association contact (SEA) 8
      c. through Teacher Center contact 15
      d. through an ERIC Clearinghouse 54
      e. through direct personal research 74

   3. If you have not used ERIC, was this due to any of the following?
      a. don't know what ERIC is 627/69%
      b. don't know of any access points 167/18%
      c. no school-provided funds 39/4%
      d. any other particular reasons 75/8%

III. If you have used ERIC, was the information useful to you? YES 131/96% NO 5/4%
If no, explain briefly why not?

IV. If you have used ERIC, what form did the information use take?
   A. personal manual search of Resources in Education (RIE) 59, of Current Index to Journals in Education (CIJE) 42
   B. manual search, by others, of RIE 10, of CIJE 7
      search conducted by SEA 3, LEA 3, ERIC Clearinghouse 21, other 7
   C. computer search of RIE 19, of CIJE 10
      search conducted by SEA 4, LEA 2, ERIC Clearinghouse 37, other organization 9

V. If you have used ERIC, briefly note:
   A. its strengths (in relation to your particular information need/problem)
      n=110
   B. its weakness (in relation to your particular information need/problem)
      n=60
APPENDIX F

FOCUS NEWSLETTER ARTICLES
Computer program locates reference materials

Nearly 100 searches have been made since July 1, 1979, for resource materials requested by Lincoln Public School employees, using the Educational Resource Information Center (ERIC) project.

ERIC is an information retrieval system providing up-to-date information and resources on kindergarten through post-secondary level subjects for use in the classroom or for system-wide committee work. Research can be done manually at the LPS Media Department, or through a computer.

LPS is serving as the model for an effective way in which ERIC can effectively be implemented into a school district, and also to evaluate its content.

Betty Dillon-Peterson, LPS staff development director, initiated the idea of studying ERIC for one year after attending a meeting of the National Advisory Committee for the ERIC Clearinghouse on Teacher Education, where concern was voiced that the system was not being used by teachers.

So far, about 137 LPS staff members and administrators have been trained to be links between their schools and the media services department. Staff media specialist Donna Peterson serves as the link between the schools and the state-wide system, State of Nebraska Information Center for Educational Resources (SNICER). SNICER coordinates the search with other computer systems in the country.

Dillon-Peterson said she considers the program to be very useful. "I feel that it is important that people stay mentally alert by looking at as many possibilities as they can find, and in this way be continuous learners," she said.

ERIC has 16 clearinghouses in a variety of disciplines. Teachers, administrators and media specialists are encouraged to request information through the computer. Requests already received include: information on school vandalism, how to implement learning-interest center for junior high math, descriptions of the role of the school guidance counselor, effects of grade repetition, types of instructional materials available on social studies for the gifted, and information on teacher "burn-out."

Requests are answered in about one month with a packet, usually containing a computer printout, a summary of educational research, microfiche and/or journal article reprints. The cost of the search is normally $10. For LPS teachers however, the cost is covered by the federal grant received for the testing period, which ends in February.

Once a search has been made, and the initiator returns the materials, the documents will be retained by LPS media services and can be obtained from Donna Peterson. A limited number of microfiche portable readers are also available from the media services department to read the fiche.
ERIC Project Report

As of December 1, 1979, 168 computer searches have been initiated by LPS staff members since June 1, 1979. Approximately 110 searches have been completed and are in the process of being evaluated. The remaining 58 have not yet been received from our linking agent, SNICER, at the State Department of Education.

A complete list of ERIC searches that have been initiated from October 1978 through December 1979 is being sent to all staff members and Linkers who participated in the ERIC in-service workshops.

If you would like to know what searches have already been done, please ask your building "Linker".

Searches that are complete and on file at PSAB Staff Media are listed below:

#7  Science Teacher characteristics
#177  Gifted education
#298  Home economics programs for the mentally handicapped.
#325  Learning disability characteristics, identification and prescription.
#326  Math enrichment programs for gifted elementary and junior high.
#380  Ceramics activities for junior high.
#352  Latin American culture
#393  Microcomputers and instruction and administrative evaluation.
#406  Peer evaluation of teachers
#347  Writing performance and behavioral contracts—elementary.

Important:

If you wish to initiate an ERIC search, you should contact your building Linker soon. Since the special project ends February 1, 1980, all searches initiated before that date will be funded by the ERIC project.
ERIC Project Report #3

Need to get information on a learning problem? The Lincoln Public Schools/Educational Resource Information Center (ERIC) Clearinghouse on Teacher Education project, which makes it possible for LPS staff members to conduct computer searches through the ERIC system, will end February 1.

People who wish to initiate a computer search should contact their building Linker as soon as possible. So far, 223 searches have been done since June 1, 1979.

Currently, most searches are either in the hands of the initiator or are not back yet from SNICER. Very few are on file at PSAB. Future plans include returning all searches to PSAB media center to be placed in an ERIC file. Each building will have a complete list of searches that will be updated as more searches are made.

The evaluation team will be interviewing selected staff members for a project evaluation. ERIC workshop participants and searchers may be asked for their input.

Searches recently added to PSAB ERIC file:

#509 Classroom materials on lobbying
#326 Math enrichment for gifted Elementary/Junior High
APPENDIX G

LEADERSHIP TRAINING WORKSHOP AGENDA
LEADERSHIP TRAINING WORKSHOP AGENDA

9:00 a.m. Brief Computer Searches

9:30 a.m. Overview of the ERIC system

1. RIE
2. CIJE
3. ERIC Thesaurus

10:30 a.m. Manual Searching

1. Brief walkthrough using ERIC handouts
2. Walkthrough by SNICER and ERIC staffs

11:30 a.m. Computer demonstrations on manual search topics

LUNCH

1:00 p.m. Participant-constructed computer searches

2:00 p.m. Discussion of Lincoln Public School expectations and procedures

3:00 p.m. Wrap-up
APPENDIX H

EVALUATION QUESTIONNAIRE
1. When initiating an ERIC search, did you have any difficulty in formulating your questions?

IF YES, What kind of difficulty?

2. Was the ERIC search you initiated useful to you in obtaining information for your job (such as program planning, curriculum development, classroom instruction, problem solving)?

IF YES, How have you used the information you obtained from the search?

IF NO, Why was the search not useful?

3. Did the ERIC search include the information you expected it to?

IF NO, What different information were you expecting?

4. Do you feel the information provided through the ERIC database was complete enough to answer your questions?

IF NO, What questions would you still like to have answered?

5. Did you have any difficulties using the information provided in your search?

IF YES, What kind of difficulties?
6. Which forms of information were provided in your search?
   - Computer Printout
   - Paper Copy of Journal Articles
   - Microfiche

7. Were any of the forms of information you received particularly inconvenient to use?
   IF YES, What type of difficulty did you have?

8. Have you ever submitted any resource materials to ERIC for inclusion in the data base?

9. Do you have any resource materials you have developed that you would be willing to submit for inclusion in the ERIC data base?

10. Do you know of additional resource materials that could be included in the ERIC data base?

11. Do you plan to use ERIC again?

   - ERIC Searches Cost $10.00 Each -

12. Would you use ERIC again if the cost of the service were deducted from your building's instructional funds?

13. Would you use ERIC again if you had to pay for a search yourself because funds were not available through LPS?

14. Do you feel that money should be allocated by the district to finance ERIC searches?
APPENDIX I

FOLLOW-UP QUESTIONNAIRE
Lincoln Nebraska Questionnaire

I. What is your staff position?

II. Have you ever used ERIC in obtaining information for use in your job (such as program planning, curriculum development, classroom instruction, problem solving) rather than for more personal use (such as career advancement, theses writing)?

1. If yes, have you used it more than once?
   If no, why not?

2. If you have used ERIC, where did you get information about initiating ERIC searches?

3. If you have not used ERIC, was this due to any of the following?
   a. don't know what ERIC is
   b. don't know of any access points
   c. any other particular reasons

III. If you have used ERIC, was the information useful to you?
   If no, explain briefly why not?

IV. If you have used ERIC, briefly note:
   A. its strengths (in relation to your particular information need/problem)
   B. its weaknesses (in relation to your particular information need/problem)