

# Archived Information

## Interim Evaluation of the North Central Regional Educational Laboratory

### I. Brief Overview of Laboratory

### II. Implementation and Management

#### A. To what extent is the REL doing what they were approved to do during their first three contract years?

##### Strengths

The Lab appears to be operating as planned and described in the original proposal, with any variations either clearly explained in regular reports to OERI or planned cooperatively with OERI. The variations appear to be clearly justified by events outside their control, shifts in priorities supported by OERI, or to take advantage of opportunities that arose. The Lab prepares a very large number of materials for general distribution or for use in its training and other dissemination work. These materials appear to be both timely in their scheduling and available when they are needed, without any apparent serious disturbance of Lab program operations or effects of those programs.

The Lab appears to be structured tightly enough to accomplish work as planned, but flexible enough to respond to important needs that arise or to take advantage of opportunities. A particularly important part of Lab operations is a practice of costing projects with a contingency line of a percent of total. Failing to do so almost certainly would eventually result in serious troubles with some projects.

The Lab is organized into four Centers that correspond to its major functions. Given the size of the total staff and the quantity and complexity of projects and tasks, some form of subdivision of the organization almost certainly is essential. This form seems reasonable. Care

appears to be taken to have an overarching system for working that engages staff from all the Centers in projects as their skills and services are needed. While there is an obvious identity of staff with their function, the Centers do not appear to be isolated in either their sentiments or work.

Each of these Centers is led by specialists who appear to be highly capable and dedicated to the work of the Lab. Their staffs seem well balanced in the capabilities needed to serve the functions of their respective Center.

### **Areas of needed improvement**

An organization as large and complex as the Lab, and with such a complex set of goals, projects, clients, and events almost certainly will have at least some “slippages” in coordination and consistency. Such appears to be the case with the Lab. These “slippages” appear to be a result of not having a translation of the Lab mission into a clear vision of the *strategies* that are to be put into place to accomplish overall goals and a lack of a clear and common understanding of the technical and theoretical foundations for those strategies.

While it is apparent that the Lab has a clear plan of *actions* to be taking, the linkage of that set of actions to an *optimum* set of foundational theories, concepts and their operational definitions, and logical process designs is not so clear. On the other hand, there is a clear set of practices in the Lab for approaching a new task area by conducting a review of literature relating to the topics of concern and using contents in that review as part of its planning, development, and actions. That practice is not a matter of question: what is in question is the *quality* and *depth* of the study of the foundations for an application and then the level of *precision* of translation of the those foundations into strategies for achieving goals. Some examples of this point include:

- Not apparently considering public schooling as an element of American culture and then considering carefully the significant body of information that approach would

open. The organization of educational systems into schools, grades, and classrooms are traits of that culture. Other traits include, among others, roles of student and teacher, curriculum organization into content areas and grade levels, and teaching methods. These cultural expectations probably are perceived differently by the general population and those people who practice within the field, yielding important “subcultures” and a framework for analysis of assumptions.

- Not adopting clear conceptual and operational definitions of key concepts relating to Lab mission and programs that are both well-linked to the technical or theoretical foundations in their respective disciplines and optimally-useful for providing analytic models for application in the work of the Lab. Examples of words that reflect a “sloppiness” of attention to detail in definition are “technology” and “standardized test”. Both are used in the Lab materials and communications in rhetorical ways that are common in current advocacy for ideologies or alternatives. However, these patterns of use for advocacy often obscure more legitimate approaches to education and distract attention to development of “professional” systems of practice in education—approaches that might provide obviously-linked analytic models.
- Not assuring that work within the organization builds consistently upon other works, or not assuring that key findings are analyzed critically by applying the full range of knowledge bases that should be applied in the interpretation process. For example, one paper that documented “curriculum reform” efforts in states and the “standards” that are being applied applauded the results of the efforts by interpreting the increases in scores on high-stakes tests as evidence of success. Yet, another paper from a year earlier about high-stakes testing had documented the tendency for teaching-the-test as an expected response to such programs—a plausible explanation of the increases reported in the later paper, and an explanation that is not so laudable. Other works criticize practices that are examples of misuses of test results as a justification for using “authentic” assessments rather than “standardized tests”. The concept of “standardized test” was misused, or sloppily-used at best, in an approach to advocate focusing on complex learnings rather than lower-order. Using words sloppily or incorrectly to set up a “straw man” as a strategy in advocacy is not a practice that is laudable, especially in an organization that bills itself as “using best research and applying best research practices”.

### **Recommendations for improvement**

Review the key concepts that are used in all materials, processes, and communications to assure clear and consistent operational meaning across the projects and works of the Lab, and to assure that the *most useful* and *generalizable* meanings are adopted. Furthermore, adopt or refine the processes within the organization for using the best expertise available to define the standards for definitions and processes. There appears to be a great deal of internal and external review of

all products and processes. Nevertheless, there is some important slippage in the designs of definitions and processes. The designs and definitions do not appear to be as precise and useful as they might be. The specialized fields represented among the staff of the Lab have developed to such high levels that design processes should be far beyond the point of using “democratic” methods to make professional or technical decisions. Furthermore, it is very apparent that individuals within the respective fields who staff the Lab have high levels of accomplishment. For each project task, the best technical and theoretical expertise from each applicable area should guide the initial design decisions, the review of development processes and results, and monitoring of pilot testing and implementation. Group processes within the Lab should assure the optimum use of expertise by privileging expertise over “democracy”.

**B. To what extent is the REL using a self-monitoring process to plan and adapt activities in response to feedback and customer needs?**

**Strengths**

The Lab has a Center (EPIC) dedicated to this function and that Center has an extremely capable leader and highly capable staff. Furthermore, it is apparent that the work of this Center is central to planning and managing all Lab projects. Indeed, a major determiner of the quality of work by the Lab is the feedback from the monitoring processes. It is apparent from project reports that the monitoring occurs, but more important is the apparent readiness of EPIC to identify and report problems or weaknesses. There is further evidence in project evaluation reports and later versions of products or processes that this feedback was actually used to make improvements. This is the case for almost all products and services of the Lab.

The Lab routinely uses specialists both inside and outside the organization to provide feedback on materials, including most publications. It is apparent from the process that results of

these reviews are considered seriously as the final products are produced. It also includes built-in user-feedback methods and materials in almost all products, including its web-based materials and regular publications.

The EPIC staff are frequent participants in the events and programs in which services are delivered, allowing opportunities for observing and interviewing in a natural setting for the materials or processes. These staff appear to have genuine relations with their clients and colleagues from other Centers, allowing high-quality data from these observations and interviews.

The Lab contracts with external evaluation specialists for special surveys (e.g., Gallup) to determine, among other things, name recognition, user satisfaction, and the degree to which needs are being met. In addition, the Lab is entering into contracts for external evaluation of major program components.

### **Areas of needed improvement**

A large part of data-collection regarding effectiveness or quality of products or services depends on surveys or questionnaires of various forms. Many of the items included in those processes or materials are highly prone to distortion error from “social desirability” or “generosity” in responding. It is not clear that these two forms of error are taken into account routinely in either the design of the data-collection systems or in analyses and interpretation of responses. This type of error should be addressed directly.

A significant proportion of the survey materials and approaches depend on voluntary response. Some of these have low response rates and are prone to returns that represent particular segments of the recipients or ones who hold particular views—sometimes positive and sometimes negative, depending on the original relationship with the Lab. Extreme care is needed

to attribute significant meaning to these responses.

Most projects include significant evaluation design work, especially to prepare questionnaires or feedback forms. Given the amount of time and other resources required to develop and produce these materials and to collect, process, and analyze these data, and the issues of quality of information obtained from their use, it seems that the costs may outweigh the value of some of these efforts. Other less-costly approaches that produce higher-quality data—even if less in “quantity”—may be recommendable.

### **Recommendations for improvement**

Adopt some approaches to account for “social desirability” and “generosity” in responding for all measurement processes that are prone to such error (interview responses are also prone to these errors). Among methods might be triangulation or adoption of other forms of measurement that are not prone to these errors.

There appears to be a general weakness in the application of best design standards in the initial versions of Lab processes. As a result, the process evaluation must detect problems and help correct them, placing an unnecessary burden on process evaluation. It appears that some of the resources given to “inspection” of processes and “results” could be used better if the original designs represented principles that were better grounded in technical or theoretical models.

## **III. Quality**

### **A. To what extent is the REL developing high quality products and services?**

#### **Strengths**

The Lab has developed a wide array of printed and web-based materials that address a broad range of interests and target audiences. These materials include, among others, special papers dealing with topics of immediate or critical interest, regular publications covering general

and varied topics of interest, series publications dealing with single topics, publications that focus on particular audiences—policy-makers, administrators, trainers, teachers, or scholars, training materials, and web materials for general information and for training. These products are carefully developed and generally represent high standards for editing, content selection, graphic design, audience and purpose match, and production. Furthermore, they appear to be timely and relating to important issues or concerns in education or public policy. Feedback from users is consistently positive about quality, appropriateness, and usefulness.

This wide range and large number of products will result in an obvious obsolescence and need for revision or replacement. A regular plan for making these revisions or replacements is built into most project operations, including the flexibility to increase or decrease focus as the needs seem to demonstrate.

The Lab has assembled a highly-capable staff who have developed genuine relations with clients. Several clients expressed how they are able to deal with the staff “as people”. These staff demonstrate high levels of energy and dedication to the Lab and its work and a genuine interest in their clients.

In almost all areas of Lab services, clients differ at the outset in readiness to change or ability to use the products or services. In cases documented for this review in which organizational conditions were a good match for the services, important and large-scale changes have resulted from the Lab work. For example, in states where general policy actions demand a focus in areas addressed by the Lab, people reported that almost all administrators in the state use the language included in particular works. In another state, a focus on “engaged learning”, which is disseminated by the Lab, is required (and included) in all school-improvement plans. In school districts that have created strong expectations that schools make significant

improvements, some schools have entered into high-intensity relations with the Lab and made important changes in their instructional systems and student performance as a result. Furthermore, in school systems in the region where adoption of “engaged learning” supported by use of computer-based processes was expected in schools, facilitators trained by the Lab are conducting training to prepare teachers to use the systems.

The training systems developed and implemented by the Lab appear to have a primary goal of improving teaching and learning by focusing on, among other things, student engagement in learning, meaningfulness of learning, and student responsibility for learning. Toward that end, the Lab has developed a wide range of training and instructional materials that make those changes *accessible* to teachers or others for whom the training is intended. In these training systems, an approach includes developing the conceptual framework and then demonstrating the application with several examples. For those examples, a set of “captured wisdom” has been developed and presented in CD format. These case demonstrations appear to have been carefully selected to illustrate the applications clearly and to demonstrate how they actually might be adopted or adapted. The production quality of the video and audio is good, and the application program for the presentation makes the materials both easy to access and to move within. Those materials appear to be an effective and critical part of the training program. Furthermore, now as devices in the Lab web site, they are prepared well enough for a teacher who accesses them through some search process to “get the point” from a few examples, even outside of a training context.

The Lab appears to have established a relationship with the regional service agents in the states and receives important personal support from that group of people as well as help from them in determination of needs and dissemination of products and services.

The Lab has developed several web sites that are emerging as key sources of information on topics important to the field of education, generally, not just in the region. These sites are cross-linked among themselves and with a number of other related sites. They are intuitively appealing and easy to access and use for information access and for more in-depth study of content. Furthermore, they are developing as critical components of the Lab training programs, with much of the training materials being updated and added to the sites.

### **Areas of needed improvement**

The Lab has made a heavy commitment to a process of “co-development” of its processes and services with its clients. While that approach has much to recommend it, there are some serious *potential* weakness that can result from implementation that does not have some deliberate method for introducing and assuring use of the *best* technical and theoretical information into design decision-making. This appears to be an important point of quality “slippage” in Lab projects. None of the presentations or responses to questions made by Lab staff during the site visit revealed an overarching technical or theoretical approach to co-development. (There was regular reference to applications of research, and there *are* apparent processes that are applied situationally, relying on the skills of the process managers and participants. Furthermore, there are some “checklists” and other devices that have been adopted as planning tools to facilitate the planning work. However, these devices do not approach the level of overarching technical or theoretical analytic model that specifies or implies a *generalizable* set of variables with operational definitions that can support the analytic and decision-making processes.)

In sites where organizational conditions do not already match conditions needed for change readiness, there is little evidence of systematic positive effect, for example the low

amounts of training provided by facilitators in such settings. Furthermore, while the Lab seems very successful in responding to requests for services, there does not appear to be an overarching strategy for initiating services for those who are not inclined to request it.

### **Recommendations for improvement**

Develop the initial designs for Lab processes that represent more powerful technical or theoretical models than ones now used, and adopt a strategy for “scaling up” that actually represents what is already known in that field. Related bodies of information are well established in the areas of, among others, innovative and incremental change, instructional-systems development, small-group structures and change, role theory, motivation theory, some economics theories, “critical mass” theory, and culture and climate. The Lab might add to that existing knowledge base by careful study of its experiences, especially if there is careful design to add to the understandings represented by the original models. These two points—improved initial designs and adopting a strategy for scaling up—are very closely related tasks, and the issues underlying the kinds of improvements in the Lab that are being suggested are the same.

Consider as an example, suppose you want to get teachers to begin using computer-based tools within the context of “engaged learning” or “problem-based learning”, you might begin with quite a different definition of “technology” than reflected in current Lab materials and communications. Consider the following two conceptual definitions that have long histories (long before computers) in both organization theory and “dictionary” language:

- Technology: The assumptions held about how a job should be done (or, how a task should be accomplished)
- Technique: The tools, materials, and methods for applying technology (the assumptions) to a task

There is nothing about this definition that requires “technology” for a particular job to be

the same among the people within any given work group. Thus every teacher, principal, superintendent, trainer, etc., has a “technology” for the work associated with their position. They have a “mind picture” of how the job should be done, and, thus, a set of assumptions about what they should know and be able to do for successful performance. With this idea, it should be apparent that if we want teachers to adopt a particular technology that is different from their own, then we have to get them to assume “that’s how the job should be done”. But, since “teaching” is an element of the general culture, with particular differences from the general within the subset of people who are teachers, then the teachers may not even be aware of their “technology” and they almost certainly assume “that’s the way it’s supposed to be”.

Using this definition, one might go about adopting a strategy for changing technology of teachers by:

- Developing or adopting a model for analysis of assumptions about teaching that covers both the cultural element of teaching and the dimensions that may be particular to person—Assumptions about role of student in learning, role(s) of teacher, what is important to learn, how learnings should be organized, how learning should be assessed, for examples.
- Developing or adopting a model for assessing the “technology” represented by the particular option that you might want someone to adopt.
- Developing or adopting a model for obtaining a dependable assessment of technology (This is an area that would be highly likely to be affected by social-desirability in response.)
- Developing or adopting a model for determining the “real” and “perceived” differences between a technology held (by individuals and groups) and the technology proposed.
- Assessing the technology of each teacher.
- Determining the discrepancy between the existing and desired technologies.
- Applying principles of instructional-systems design to develop systems for resulting in the desired assumptions about teaching—notice that this may or may not include “skill training”.

- Applying principles of instructional design to develop training systems for teaching the knowledge and skills needed to apply the technology.
- Applying Perrow’s principles of “technology-structure” congruence to determine the form or organizational structures needed to support application of the technology.
- Developing plans to change the organization as needed.
- Implementing the training system
- Obtaining the tools and materials required to match the desired technology.
- Implementing the organizational change processes

Using the approach illustrated above, key concepts can be defined in a way to lead directly to analytic models and to corresponding models for change—leading to adoption of an innovation, or “scaling-up”.

#### **IV. Utility**

##### **A. To what extent are the products and services provided by the Laboratory useful to and used by customers?**

###### **Strengths**

The Lab has a wide range of printed and web-based materials for a variety of audiences, including policy-makers, education leaders, and teachers, among others. These materials are distributed widely by mail and other means to people throughout the region and country. Central to the products are several web sites intended for particular purposes and for different audiences. Those sites are, for the most part, high in quality and have been recognized by several important awards. These sites also are becoming more and more used, with “hits” increasing at a rapid rate.

A key feature of the efforts to improve instruction in the region is the focus on “engaged learning”. For that purpose, the Lab has developed training programs and materials that are

extremely “accessible” to teachers—making big changes in instructional practice but in ways that do not appear to be so difficult. The programs are efficient in amount of time required, yet still prepare teachers to begin using the approaches in important ways. Furthermore, Lab web sites are design to allow the users to continue learning, to communicate with other teachers, and to receive additional instructional resources. Teachers who participate in these programs appear to recognize that they have learned a great deal and made important changes from the work with the Lab.

Several special-issue services, such as related to charter schools, have developed to become among the major sources of information on the topic in the country. The Lab is central to, and engaged in, the leadership in and support of the development of these fields.

Reports on regular surveys of users indicate satisfaction with and usefulness of products and services.

### **Areas of needed improvement**

The Lab is widely known in the region by leaders in states and schools systems. However, name recognition by principals is much lower than others higher in the education hierarchy and teachers have yet a much lower recognition rate than principals. While it is not essential to benefit without knowing the source, the recognition probably would encourage both access to Lab products and services and enhance dissemination efforts.

The Lab has been very successful in serving those people and systems in which conditions were supporting change. It has not been so successful in developing that readiness throughout the region (i.e., in states other than Illinois and Ohio) and strategically providing its services to develop that readiness and then the support needed to follow through to adoption. There remain significant “gaps” in the region with sparse service and intensive impact from the

Lab.

### **Recommendations for improvement**

As for some other issues addressed herein, there is a need for overall strategic view of how the mission of the Lab will be served in all areas of the region, especially to the level already apparent in some states.

#### **B. To what extent is the REL focused on customer needs?**

##### **Strengths**

The Lab has regular processes in place for national and regional “needs scanning”, surveying various “publics” in the region, and responding to requests. Its Board of Advisors includes leaders from throughout the region, and a regular part of the meetings and correspondence with the Board deals with the question of needs. In addition, the Lab includes feedback forms in many of its materials. Once identified through these processes, the Lab assesses the results and works toward addressing those needs. There is little evidence of Lab work that does relate directly to some identified priority area.

##### **Areas of needed improvement**

A difficult task in determining needs from expressions is determining the need from the expression (Yes, that says what I meant.). Expressions usually are *symptoms* of something that may, or may not, actually be a need. The critical responsibility of the service provider is to determine the “actual” need that triggered the expressions. Here the issue is similar to the task of determining “root cause” of poor process performance in efforts for process improvement. Furthermore, once identified, the one who expressed the “need” may not recognize the “real” need as important. Therein lies the difficult dilemma for the Lab. It has responded significantly to the general areas determined by its assessments, and it has spent considerable energy trying to

determine what those expressions mean. Nevertheless, generally beginning from expressions, whether revealed by surveys, discussions, interpretation of news events, or whatever, limits the set of “needs” that probably will be assessed. Other viable approaches in formal assessment and assumption based on sound evidence.

### **Recommendations for improvement**

Use some of the experiences in the schools where there is intensive work to assess organizational (including policy), skill, sentiment, and other conditions that reveal needs at a more “fine-grained” level than the broad categories usually expressed in the surveys.

## **V. Outcomes and Impact**

### **A. To what extent is the REL’s work contributing to improved student success, particularly in intensive implementation sites?**

#### **Strengths**

The primary strength to almost all the work of the Lab is its focus on adoption of teaching strategies that engage students in learning activities that focus more on complex learnings than on academic content. In the intensive implementation sites for which there are data, there is some clear evidence that the systems of instruction are more in line with the Lab focus than before their engagement with the Lab. These changes in instruction clearly have students engaged in active learning. These schools were “low-performing” before engagement with the Lab and are well on their way to being successful schools.

#### **Areas of needed improvement**

The change efforts are being made within a context in which the school districts have placed strong pressure on the schools to make changes to improve and have provided significant other services than those provided directly by the Lab. Therefore, it is difficult to attribute

changes in student performance to the Lab and its work. The Lab needs to be able to assess its impact irrespective of the other systems of service and influence that may be in place. No small challenge, but important to attempt.

### **Recommendations for improvement**

Include as part of planning and contracting process with sites an assessment of the outcomes in the particular site that can reasonably be attributed to the Lab.

### **B. To what extent does the Laboratory assist states and localities to implement comprehensive school improvement strategies?**

#### **Strengths**

In Illinois and Ohio the Lab has worked intensively on various “fronts” to encourage use of “engaged learning” processes, especially by using computer-based methods in the instruction. It seems apparent from reports and interviews that the language used by the Lab is part of the common vocabulary in those two states. Furthermore, in Illinois, engaged learning is a required part of all school improvement plans. Other states have less intensive and extensive engagement with the direct services of the Lab, but there are significant initiatives at the policy, management, and teaching levels in all other states of the region.

A significant portion of the Lab strategy for change is a training program for teachers and training facilitators. That program is available to develop the capacity of states and localities to make changes if they should decide to do so.

Another important effort of the Lab is to serve the states and localities in the adoption and implementation of comprehensive reforms under the federal CSRD program. That system of services is developing rapidly as the demands for assistance increase as funding becomes available for the schools.

### **Areas of needed improvement**

A strategic approach to scaling up is needed to direct those efforts.

### **Recommendations for improvement**

See other sections regarding strategic vision.

## **C. To what extent has the REL made progress in establishing a regional and national reputation in its specialty area?**

### **Strengths**

Through its web sites and several publications, the Lab is widely recognized as a leader in several general and specific areas, notably application of computers and web-based information access in school operations and instruction, instructional reform to make learning meaningful. From surveys, the Lab is seen as the primary source of information and assistance in addressing several contemporary issues related to the mission of the Lab.

### **Areas of needed improvement**

There remains a need to reach some areas of the region more intensively and to expand its coverage of some dimensions of the audience, notably principals, teachers, and schools of education. The Lab may not be able to continue to expand its coverage more intensively without using other vehicles for delivery.

### **Recommendations for improvement**

The Lab should consider expanding its relationships with schools of education, state education agencies, and other training and technical assistance organizations to help them develop the capacity to deliver some of the resource-intensive services now being provided directly by the Lab.

## **VI. Overall Evaluation of Total Laboratory Programs, Products and Services**

**and**

## **VII. Broad Summary of Strengths, Areas for Improvement, and Strategies for Improvement**

The Lab is comprised of a significant group of highly capable and highly dedicated people who have established genuine professional relations with people and agencies in its primary region. It has developed significant initiatives in several areas or service to schools and education agencies, notably applications of computers, focus on meaningful learning, school and curriculum reform, data-based decision-making, and charter schools, among others. The Lab has a complex set of materials, web sites, training systems, technical assistance services, and other delivery means that all function well within a complex organization arranged around its main functions.

The Lab holds a special position in the minds of many people and agencies in its primary service region who have sought and received help to achieve things that were important to them. A number of clients indicate that the Lab is thought of first whenever they have a need for help or information. Recent very-fast response to requests for significant assistance in implementation of CSRD programs demonstrate the willingness and capability to be responsive to major regional or national needs, even within the context of an already-stretched organization.

Nevertheless, the organization appears to be struggling with issues, especially related to “scaling up”, that are limiting its effectiveness from what it might be. Particularly, there is a need for an apparent strategic approach to achieving its mission. Such an approach may be either overarching—laying out the ultimate goal(s), specifying a strategy to have in place that should result in achievement of the goal, and then laying out a plan of action to put that strategy into

place—or incremental—determining important increments that should ultimately reach a sufficing state in respect to the original goals. Either approach has both advantages and disadvantages, but achieving massive change in educational systems and processes probably will require adoption of one of those approaches and following it very carefully.

Overarching approaches require careful attention to front-end design and development of the means to the end—requiring some very deliberate planned-change process. This level of front-end design does not appear to be operating at the level of effectiveness needed for this approach to be fully successful. On the other hand, incremental approaches must be managed very carefully to determine most important increments at any historical point in the process and then achieving that increment while maintaining the changes that have already been achieved. With incremental approaches, it is easy to lose increments at about the same rate as others are achieved.

If an incremental approach should be adopted, the process of change toward the ultimate goal will need to be managed very carefully in light of “critical mass” theory toward a critical mass. The critical mass will need to be projected and plans made for meeting the service demands once that critical mass is achieved. At that point there will be a very rapid increase in demand for services. To meet those needs, the Lab probably will need to be implementing a parallel program to develop the capacity of alternative systems to meet those demands. Without those services in place, the absence of desired services probably will result in a loss of that opportunity to institutionalize the change that was intended.