

Archived Information

Interim Evaluation of the North Central Regional Educational Laboratory

I. **Brief Overview** **...Of the Laboratory**

The North Central Regional Educational Laboratory (NCREL) is described by its director as an “adolescent Laboratory.” It was first funded as an REL by OERI in 1985 and has been refunded through two additional cycles in 1990 and 1995. NCREL serves a seven state region that includes the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin, i.e. the relatively homogeneous midwest. The region contains 20 percent of the country’s population, 20 percent of the country’s school-aged youth, and 25 percent of the nation’s public schools. The Laboratory began with a budget of a million and a half dollars and a staff of 25. It now commands an annual budget of 16 million dollars and is staffed by about 120 people many of whom are housed in an office building in Oak Brook, a suburb of Chicago.

With the approval of OERI, NCREL is organized into four centers and one specialty area, which is technology. (Specialties are specified under the current RFP. For NCREL, the decision to be the technology Lab was a natural outgrowth of the emphasis they have traditionally put on the use of technology to serve the region). The centers are:

1. Center for Teaching, Learning and Curriculum (CTLC)
2. Center for School and Community Development (CSCD)
3. Center for Scaling Up
4. Evaluation and Policy Information Center (EPIC)

Jeri Nowakowski is one of the veteran Lab directors at this point, having been in the position for ten years. She has recently announced her resignation as of May 31 and will be

replaced by Gina Burkhardt, who has served as an associate director of NCREL for the last 18 months and was previously employed at other RELs.

... Of the Activities

The six-person peer review team visited NCREL during the week of April 25. The agenda consisted of a mix of presentations around the signature works, visits to schools, question and answer periods with Lab staff and time for peer review panel interaction and reflection. The signature works that were considered by the peer review panel are:

1. Design Support for School Improvement
2. Technology for Teaching and Learning

The peer review panel of six individuals was one in which many perspectives were brought to bear on the work of the Lab and was an effective mechanism for surrounding the work of the Lab with a variety of expertise. However, in some ways it is analogous to a group of people in a rowboat drifting past an iceberg and attempting to evaluate not only the eighth they can see, but also the seven-eighths that is under the surface.

II. Implementation and Management

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

1. Strengths

The paper trail of accountability provides strong evidence that NCREL has documented satisfactory progress over the three year period. Quarterly progress reports submitted to OERI provide an ongoing record of the work they do by task, by Center, and by print and software products completed and disseminated. Changes to the scope of work proposed to OERI in 1998

are documented in the Scope of Work document.

Two areas required by the 1995 RFP require some special notice. One is “putting the pieces together”, which NCREL has attempted to do (at least in part) through work in its intensive sites; the other is “bringing the work to scale,” which NCREL has attempted to do through dedicating one of its centers to the task.

A further requirement of the RFP directs the Labs to leverage additional funds to carry out their work. NCREL has taken its approximately 8 million dollars from the REL contract and added approximately 8 million additional dollars in other funding. The Laboratory seems to have done exceptionally well in bringing in funds (such as those from the math science consortium, NCRTEC, the Department of Defense and others) that advance their work and further their mission. Further, the Lab has done a good job of incorporating additional grants into their center structure, thus making it possible to provide a seamless approach to getting the work done, no matter what the funding source.

2. Areas of Needed Improvement

Putting the pieces together and scaling up are both somewhat problematic for NCREL. While putting the pieces together is a natural goal for R&D work, it is not clear that all the Laboratory intensive sites are natural locations for meeting the goal. With the Chicago Public Schools, (The Every Child Can Succeed initiative) for example, NCREL is providing a package of services under contract to CPS and the extent to which they can actually bundle services is dependent on (1) the requirements of the contract they signed with the Chicago Public Schools; (2) the extent to which the frontline NCREL staff is familiar with all the services from all parts of the Lab and (3) the extent to which the schools are receptive to a variety of services, especially in the area of technology.

As for scaling up, NCREL is struggling to carry out the task using all the tools at its disposal, including technology, train the trainer approaches, best practice compilations, and its various networks at the state and service provider level. Based on the interviews and presentations that the panel heard, there is no convincing evidence yet available to say that they are succeeding and, my perception is that they are meeting with mixed success -- which is scarcely surprising since there are few if any successful models of scaling up available to them.

3. Recommendations for Improvement

The two areas discussed in the previous paragraphs are new in the 1995 RFP. The Lab needs time to be successful. I think their trajectory is headed in the right direction and that another cycle will make a big difference in their effectiveness at putting the pieces together and scaling up.

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

1. Strengths

Each NCREL project is required to include a design for evaluation, according to Laboratory documents, but the overall responsibility for monitoring the work of the Lab belongs to the Evaluation and Policy Information Center, which collects data on the effectiveness of activities undertaken by NCREL, according to three overarching questions:

1. Are we doing the right work (work that is significant to regional needs and preferences)?
2. Are we doing what we said we would do, according to our plan of work?
3. Are we doing the work well?

Once a year, NCREL does a portfolio assessment, a concept borrowed from business. It involves description of NCREL programs and comparative judgments of their potential, merit

and worth -- and this assessment then becomes the a basis for writing and revising a plan of work for the next fiscal year. The NCREL board, which represents all the states in the region, reviews the portfolio and assists the staff in the direction-setting process. (Quality Assurance and Evaluation: Task 1.3).

NCREL commissions independent external evaluations of its work as well. For example, RMC is carrying out an evaluation of NCREL's popular *Learning with Technology* course for teachers. The purpose of the evaluation is to find out the extent to which teachers' exposure to the training has any impact on student learning. They are also planning an independent external evaluation of *Pathways* in order to determine the extent it is being used as it was designed -- i.e. as a tool to carry out the stages of schools reform. Some Lab staff believe that to make it effective, *Pathways* needs professional development around it and the hope is that the evaluation will shed light on this and the program's overall utility.

In addition, the panel heard from several people who have worked in various capacities with NCREL that the staff is receptive to feedback and very willing to make changes once they appreciate the need for them. For example, one higher education representative said that she had told NCREL staff that the Lab is not sufficiently well-known in the regional higher education community and that, as a result, she has been given a mandate by the Laboratory, to work toward finding ways to create greater name and reputation recognition through giving workshops, making conference presentations, and the like.

2. Areas of Needed Improvement

Almost everyone says that the Laboratory does need to find ways to make itself more well-known among a variety of groups including parents.

3. Recommendations for Improvement

This is a hard nut to crack. The creation of additional statewide networks, such as the one we heard is being formed in Minnesota is one approach that holds promise. It's interesting to think of ways to get to parents -- maybe they could take a leaf from the book of the Edison Project and give out computers at schools for students to take home and work with their families to visit NCREL websites.

III. Quality

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

1. Strengths

The quality of the products and services provided by NCREL is generally high, although somewhat uneven. There is evidence in the quarterly reports and through conversations held with the staff, that NCREL requires its products and services to be based on demonstrable needs (QPR, #1, p.2), which are identified through a variety of needs-sensing mechanisms, which include periodic Gallup polls, feedback from sites, requests from the field, and suggestions from the various networks with which the Lab is affiliated.

Certain products produced by the Lab seem to have “star” quality. One example is the publication *Plugging In*, which we heard from many different sources is a very successful, widely disseminated product devoted to choosing and using educational technology. The indicators of engaged learning, which reflect a priority in at least one state in the region, seem especially popular and are I think one of the real contributions that NCREL is making to the challenge of integrating technology into the curriculum.

Another star is the *Learning with Technology* course for teachers, which the staff has offered around the region, in New Orleans and in Los Angeles. We heard from staff that this

course is very well-received. We had some questions about whether it has lasting benefits in schools and districts that do not have the technology available in schools to apply the new knowledge.

Another exciting contribution that NCREL is making to the literature is the “Gateway Concepts” piece. Gateways got its start when NCREL was brought in by the state of Minnesota to do a third party analysis of the states TIMSS scores. In doing the analysis NCREL staff noticed that weakness in the same set of concepts was bringing down scores in physics, chemistry, and the life sciences. These concepts are energy, matter, force and motion, and systems.

At the time, the Minnesota legislature was also looking at the test score and asking for (1) better test scores, (2) better use of the investment in technology made by the state, and (3) using professional development funds to address (1) and (2). In response, NCREL co-developed with the state a website called Gateway Concepts first in science, then math, then interdisciplinary instruction, and then writing. Here, teachers can see the gateway concepts and then look at key understandings, resources, web software, pictures, and video -- all related to each concept. Also in development are exemplary lessons. In my view, Gateways and Plugging In show NCREL at its best -- focused on the uses, integration, and potential of technology in education.

2. Areas of Needed Improvement

As an evaluator, I was especially interested in the many survey and needs assessment documents that the Lab produces for schools and other organizations to use in diagnosing their needs and understanding their own organizational status. In some cases, I felt these tools were a disappointment in that they appeared simple to use, but in fact require considerable expertise to use successfully. For example, the document titled *Making Good Choices*, which is intended to

help schools select a comprehensive school reform model that matches their needs, contains a survey to be filled out by a school/district team. The items on the survey include questions such as “How effective is your school’s curriculum?” The question is straightforward enough, but it would be difficult to make an informed judgment without a set of criteria or a facilitator to assist in the process.

NCREL is headed in a direction that matches its mission in moving from print documents to audio-video as shown in utilization statistics compiled for us by NCREL. For example, in 1997, the number of print products distributed to clients was 131,093; in 1998, that number went down to 107,686. These statistics were matched by a corresponding increase in the distribution of audio/video/cd products. However, documentation of the use of such things as the website are still not informative enough. For example, while they can document the number of hits on the website, they cannot yet document such variables as the number of people these hits represent, nor the usefulness of the website -- except through individual testimony.

3. Recommendations for Improvement

The Lab is already taking steps through an on-line survey to address the issue around the website. As to their surveys and assessment instruments, they are hamstrung in a sense by needing to provide some kind of help for schools in their region without having the resources in terms of people or money to do the job in any depth. They cannot, for example, provide skilled facilitators to assist in the diagnostic process at every school. Given those constraints, my only recommendation would be that they revisit some of their tools and match their survey and assessment items more closely to the capacity of the people who will be using them.

IV. Utility

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

1. Strengths

The Lab staff appears to do everything they can to ensure that their products are useful, ranging from careful “needs-sensing” as the basis for developing products and services to modifying and customizing products and services based on feedback from the field. Identifying customers differs of course from one type of service/product to another, but there appear to be a few general ways in which groups become affiliated with NCREL.

1. They are part of or are connected to state and other formal and informal networks maintained by NCREL.
2. They request services, particularly true in technology, the Lab’s specialty area.
3. They become part of a contract or external partnership.

One major external partnership, with which the panel became quite familiar is that with Chicago Public Schools. Replying to an RFP in 1998, NCREL became an external partner with 11 elementary schools, which were on probation for low achievement. The usefulness of the work done by NCREL staff in this role is attested to by the fact that six of the schools are now off probation, because of improved performance on standardized tests. Two of the partnered schools were recognized by the district for the “most improved” scores -- one in writing and one in science. NCREL also supported five of the schools in developing CSR grant proposals and all were selected as grant recipients.

NCREL maintains extensive documentation of the use and usefulness of its products, based on consumer statistics. For example, the quarterly progress reports document increased demand for NCREL video programs (QPR 1. p. 2); increased worldwide web hits (47,000 per

week on Pathways for one quarter, QPR #2, p10) and extensive testimony presented in the quarterly reports and elsewhere about the usefulness of the “Captured Wisdom” cds, which is basically a compilation of best practice.

In terms of useful services, NCREL staff believe they offer something unique in that they are a non-profit, unbiased organization, which comes in to assess the needs of an organization and then provide, broker, or suggest solutions. The director points out that “NCREL never comes in with one solution”, but customizes its services on an assessment of needs on the one hand and its encyclopedic knowledge of a portfolio of effective programs on the other. (Based on feedback from teachers, NCREL’s decision to broker in “Everyday Math” at Cardenas Elementary School was a very good example of matching the needs of the school to an effective program of mathematics for early primary grades.) Implementation of the Strategic Teaching Reading Program was a less effective choice for the school, because Lab staff admit it is more effective at later primary grades than in the early grades -- and Cardenas is a K-3 school.

Another strength in this area is NCREL’s ability to react quickly to new happenings in the educational/political arena. Two examples of this are their publications “Charters in Our Midst” and their extensive print and programmatic response to the comprehensive school reform legislation. A key word for NCREL is “co-development” and the staff states that every product and service is co-developed with practitioners.

2. Areas of Needed Improvement

It is not clear to me how the customized services delivered to intensive sites become a core set of processes that add to the knowledge base beyond what is already known about organizational change and systemic reform. However, even if what the staff derives from the intensive sites is not new, there is value in validating the literature and perhaps making it easier

to start the change process moving faster and more effectively in new sites. Certainly, they have some good morality tales: the most compelling one for me being the work they are doing in the Chicago Public Schools. Given the requirements of the RFP, that the task of the external partner was to get into the schools and raise achievement scores, the Lab's documented research into the many variables that underlie achievement, such as climate, leadership, and teacher content knowledge were not seen as part of the mix of services. It is to be hoped that NCREL staff pose to the city administration the compelling arguments against the simplistic assumption that raising test scores is a uni-dimensional, programmatic challenge.

3. Recommendations for Improvement

I wonder if NCREL in its eagerness to get into intensive sites isn't always tough enough about demanding latitude to use all its accumulated wisdom and knowledge in every site. Maybe that can't be done, but it would be good to find ways to highlight the complexity of systemic reform to would-be clients and partners.

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

1. Strengths

In this area, NCREL seems to exceed expectations. There are several sources of evidence for this perception: (1) the staff embed all their work in needs assessment and needs-sensing, (2) the actual print and technology products are timely, focused on current priorities in education, and (3) in interviews with clients and partners, we heard that NCREL was devoted to understanding and meeting their needs. (I think of the respondent who said that when she saw that an envelope came from NCREL, she always opens it. That seems like a satisfied customer!)

2. Areas of Needed Improvement

None noted.

3. Recommendations for Improvement

None noted.

V. Outcomes and Impact

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

1. Strengths

At the intensive sites in the CPS system, the work of the Laboratory as an external partner was certainly one of the factors (and likely the major one) that resulted in six of the 11 schools being taken off probation because of the improvement in their test scores. This is actually one of the few areas in which NCREL is working that they have the opportunity to demonstrate student success. I think it is unrealistic and unfair to expect much in the arena of improved student performance from an agency as external to the educational system as the Laboratory in most of their work. I think it's laudable that they have any evidence of success here.

2. Areas of Needed Improvement

None noted.

3. Recommendations for Improvement

None noted.

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

1. Strengths

The best example of this (for me) that came out of the panel review was the experience with CSRD. The Lab has in its region the states, which both Obey and Porter, the authors of the legislation, represent. These states were obliged to be in the forefront of implementation and to take a highly visible role. Two factors are at play here. One is that the Laboratories all received funding through Obey Porter to facilitate their states through specific tasks (the document *Making Good Choices* was funded through that provision); the other was that NCREL was called upon by the states to help in the early implementation process.

As described by Lab staff, the process for providing services in this instance was one in which the Lab first convened (We didn't hear a lot about convening, but it seems to be something NCREL does very well) representatives of the SEAs in their region to find out what was needed and then set out to provide it. Their first major effort was a design fair, which the Center for Scaling Up, put together very quickly and which showcased many of the CSRD designs. The fair proved to be less successful than was hoped because the representatives of the designs were so convincing that schools could not figure out which design best met their needs. The document *Making Good Choices* was the Lab's response to the realization that schools did not have the capacity to match designs to needs.

2. Areas of Needed Improvement

The example of the CSRD is a good one in that it illustrates both the strengths and some of the shortcomings of the Lab's operations. The strengths include the position of the Lab in the region -- it was a natural place for the SEAs to turn for objective, knowledgeable assistance; the

ability of the Lab to convene, organize and disseminate information about an event quickly and efficiently; and its needs sensing ability -- in that Lab staff sitting in sessions quickly realized the capacity problem among the schools. It demonstrates a shortcoming of the Lab in that the co-development process seems not to allow the Lab staff to say (assuming they knew this) to states or other co-developers, "this is not the way to go, a design fair is not the answer." Co-development may be construed to mean that the partners are equal, when in fact the Lab staff are more sophisticated and knowledgeable than their clients.

3. Recommendations for Improvement

Revisiting the co-development process might be a good idea -- with an eye to making sure that the Lab brings to the process all its wisdom about what works and what doesn't. Co-development is critical for buy-in, but it is also an opportunity for NCREL staff to educate partners on everything from the conceptual framework for school change to the process for increasing capacity at the school level.

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

1. Strengths

The course, *Learning with Technology*, has been very successful according to Lab staff and to statistics, which say that in 1998, it reached almost 1,800 teachers. It has attracted interest from other areas of the country as well as the region. Similarly, the product called *Plugging In* has had national distribution. In general, it might be noted that the products that are (1) related to technology and (2) intended for wide distribution, are among the most polished and sophisticated work the Lab has to offer. Thus, its national reputation is based on some its very best work, which is as it should be -- as long as the quality of that work doesn't require sacrifices of quality

in other work.

2. Areas of Needed Improvement

None noted.

3. Recommendations for Improvement

None noted.

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

This Laboratory and all the federally funded Laboratories have been given a task that is almost impossible to accomplish given their resources. Serving the disparate needs of their region with a staff of 120 people and an REL annual budget of 8 million dollars, implies that the Lab will have to make many choices about breadth vs. depth of services, products vs. projects and intensive vs. surface ways of addressing issues. Thus, it is no surprise that the programs, products and services of the Lab are somewhat uneven and differentially successful.

Based on our interviews with Lab staff, they are mindful of trying to understand what works in their products and services and what doesn't. For example, they have unpacked their successful product "Plugging In" to figure out why it works so well (apparently because it is not just about technology, but about the context and placement of technology) and to learn from it. Similarly, when they have experimented with the train the trainer approach, they have been attentive to what makes it work and why. In their work with the Chicago Public Schools they are documenting the successes and challenges they face in order both to add to the knowledge base and to improve their performance.

In sum, the Laboratory does a lot of quality work and some that does not meet the highest standards, but when they fail to meet standards they work diligently to understand why and to do better next time.

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

In my view, the major strengths of the Lab are:

1. a dedicated, capable, and energetic staff who appear to work collegial together across the centers
2. a willingness to get into the trenches and work closely with clients as in the Chicago Public Schools
3. the ability to use feedback from the field and from their own learning to improve their work as illustrated earlier in this report
4. a dedication to trying all the possible avenues for disseminating their work, from technology to creating new networks to train the trainer approaches
5. a willingness to get out on the cutting edge as illustrated by their movement into technology as their major dissemination channel and by some of the work they are doing around engaged learning and gateway concepts

The areas for improvement seem to me to be closely tied to some of their strengths.

1. The organizational pattern for staffing the Lab may make it more difficult to work together. It was distressing for example to hear that staff working in the Chicago Public Schools, were not sufficiently conversant with the web-based resources of the Lab, to bring these into the mix effectively.
2. The willingness of the Lab staff to get into the trenches to work with clients is a piece of their dedication to co-development of projects. I'm not sure that co-development is always the right vehicle for using the full extent of the capacity of the Lab, but since I can't think of a better one, I am left with the idea that the co-development process needs to be as rich in education for clients as it can be.
3. The Lab's strategies for dissemination seem to me to reflect almost a desperation to get it out **somehow**. Train the trainer is a method that is fraught with danger in terms of fidelity and effectiveness. Best practice compilations, even in CD form, have very little documented success, but the Lab seems driven to turn to ways they know are less than effective because of the mandate for bringing their efforts to scale.

The strategies for improvement that occur to me are relatively simple, rethinking their organizational structure; revisiting the notion of scaling up; and, reviewing their knowledge-to-

practice-to- knowledge loop. Each of these strategies is explained in greater detail in the following paragraphs.

Rethinking the structure. This, I think, should be based on three questions: (1) does the structure reflect the need to “put the pieces together?” (2) does the existence of a center called Scaling Up actually contribute to the success of doing scale up? (3) does the center structure really reflect the priorities of the Lab, including technology and professional development?

The structure issue is complex because it reflects not only the priorities of the Lab, but the way they see themselves. My impression is of a relatively traditional hierarchical organization, which lacks the elements of cross-fertilization of ideas that create a learning community. Surely, if we are convinced that learning communities are the optimal way to undergird an organizational change, it would be beneficial to reflect that conviction in the structure of an organization dedicated to facilitating organizational change.

Revisiting the notion of scaling up. Starting with the reality that no one seems to know how to do this very well, I would like to see the Lab staff look again at the model they have devised. As I understand it, they are using two approaches: (1) taking the work in the intensive sites and using it to build core processes of effective ways of working in schools on a large scale; and (2) bringing some ideas directly to scale as with the design conference around comprehensive school reform. The second approach seems reasonable enough -- some ideas come in fully formed and just need to get to the region; the first approach is one about which I have a few questions: (1) are the lessons they are learning generalizable or are they getting stuck in a school by school approach to systemic reform, (2) are the intensive sites black holes into which they will continue to pour resources without concomitant reward in adding to the

knowledge base, (3) Would it be useful to back off from trying to do scale up and spend more time trying to understand it theoretically or through some very small studies of it?

Reviewing their knowledge-to-practice-to knowledge loop. There seems to be some re-inventing the wheel going on in the process of translating knowledge to practice. For at least some of the work that NCREL is doing in schools, there is a strong research base that we didn't hear was being brought to bear. It is my perception that the Lab consists of two major groups of people. At the risk of grossly over-simplifying, these groups might be characterized as the thinkers and the doers. This is a reflection in some ways of the peculiar position the Labs occupy, halfway between academia and applied practice and is reinforced by the center structure. I am not implying that the doers can't think or that the thinkers can't do, but that conceptual expertise seems to be more evident in the Scaling Up center and EPIC and that hands-on technical assistance is more the role of the staff in the Curriculum and Community centers. The focus question I would pose is "To what extent are we using all the knowledge that is extant in this Laboratory to inform the direct services we provide to clients?"