

Archived Information

Interim Evaluation of the Mid-continent Regional Educational Laboratory

I. Brief Overview of Laboratory and Evaluation Activities

The Mid-continent Regional Educational Laboratory (McREL) is a non-profit educational research and development organization founded in 1966. In 1995 McREL was awarded another OERI contract to, among other things, serve seven states in the middle of the country (North and South Dakota, Nebraska, Kansas, Missouri, Wyoming, and Colorado) and provide national leadership in its assigned specialty area: curriculum, learning, and instruction. In addition to its REL work, McREL also does contract work for the state education agencies in its seven state region, and the McREL board elects members to the boards of two sister organizations, the McREL Institute (a non-profit organization which does contract work for districts within the region as well as districts, state agencies and other groups in the rest of the nation and literally the world) and MCL Inc. (a for profit organization). Those elected to serve on the board of these two sister organizations are either current or former members of the McREL board, and the work of these two organizations is seen as extending the work done under the REL contract and as a way of leveraging limited federal dollars.

The interim evaluation of the REL portion of McREL took place at the Laboratory headquarters in Aurora, Colorado from May 3 through 7, 1999. This individual report is based on the following data sources: (1) the written materials sent to reviewers and reviewed prior to the evaluation visit; (2) presentations during the week-long visit by the Lab staff on various aspects of the Lab program, including operations and management, the two signature programs selected for review (Moving Standards into Practice and Partnerships as a Field Service Strategy), and a number of other programs or components of programs funded primarily or

exclusively by the OERI contract; (3) a group telephone interview with four board members representing three of the seven states McREL served under its REL contract with OERI; (4) group interviews with two groups with contracts with McREL in the area of standards based education (One group consisted of four individuals from a consortium of school districts in Iowa, a state not served by McREL as part of its REL contract; the other group consisted of four individuals from North Dakota, a state which is to be served by McREL as part of its REL contract.); (5) two group interviews with a total of seven individuals from either Missouri, Wyoming, Colorado, Nebraska, or North Dakota who work in organizations serviced by the Lab's field service team; (6) extended conversations with my fellow evaluation team members.

II. Implementation and Management

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

1. Strengths

Most of the work proposed to be done in the various task areas during the first three years of the Lab's contract has, in fact, been done. There were some problems with research sites which had been identified, but these problems were to be expected and do not appear to have inhibited the Lab's research and development work in any significant way. The clients we interviewed suggested that Lab personnel were responsive to their needs and requests.

2. Areas of Needed Improvement

A somewhat more serious problem involves the Lab's failure to provide some deliverables on time. This problem seems attributable, in part at least, to staff vacancies. The evaluation director had been on the job for only slightly more than a month when we arrived, and

the research director had come on board only several months before our visit. Furthermore, during our visit, the Lab had six advertised vacancies, three of which were at the senior level. It was not clear how many of these positions were new positions. We were informed, however, that the Lab had a 20.4% termination rate in 1998. The termination rates for the previous two years were somewhat lower: 9.9% in 1997 and 15.6% in 1996. A wide variety of reasons were given for people leaving, but “better opportunities” appeared frequently on the list. Also, some of the people who left did not work on the REL contract; nevertheless, 14 out of the 19 people who left in 1998 spent at least part of their time on REL work.

To some extent, departures and vacant positions may be a nearly universal problem with REL's, especially during the second half of an REL contract. It is worth asking, however, whether salaries (The range for the six positions advertised was \$27,000 to \$55,000.) are too low to attract and keep as many good people as the Lab requires to do its work. Some argued that Lab salaries were, indeed, adequate for the area of the country in which the Lab is located, since large numbers of people want to live in Denver and its surrounding communities. Determining whether this analysis is correct was beyond the scope of this evaluation. Also the Lab indicated it is employing creative solutions to get its work done. For instance, it has begun to rely on consultants and part time people such as retired school people in the states it serves to accomplish its research agenda. Once again, time and resources were not sufficient to investigate the effectiveness of the Lab's creative responses to its staffing problems. There is certainly some face validity, however, to the argument that people close to school sites both professionally and geographically are in a good position to do at least some important work for a Lab which, among other things, is charged with serving a large, seven state region.

3. Recommendations

1. Explore why there has been substantial staff turnover and whether salaries are sufficiently competitive to insure that this will not be a problem in the future.
2. Evaluate the effectiveness of creative solutions to staffing problems currently being implemented and consider other creative solutions such as encouraging university professors to take leaves of absences from their university positions to work on Lab projects for a two or three year period.

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

The Lab has detailed quality assurance procedures in place to review documents; the procedures specify different procedures based on the sensitivity of material, as well as on anticipated audience size and expected impact. The plans seem sensible, and we saw evidence which indicated that the procedures were, in fact, used. We also saw evidence that workshops presented by staff members were evaluated in a formal way.

Lab personnel also use a number of less formal but apparently highly effective procedures to anticipate needs and direct much of the Lab's work. A major function of the State Facilitation Groups—which are normally composed of a deputy superintendent, a researcher, and a field services person—is to set the agenda for service activities in the state. Some of the identified work is carried out by the Collaborative State Action Team in each state; this team has even broader representation.

In addition, a Lab liaison for each state, who works with the above two groups, meets yearly with the chief state school officer. This individual reports back on this meeting and other work done in the state to the McREL staff as a whole, not just the field services component of the staff. A yearly meeting with representatives from each state's governors office, legislature, and state department of education also provides information about issues which are salient to

policymakers in the region, even though this is not the primary purpose for these meetings. Finally, the Lab maintains briefing books on each state which describe and track recent legislation and other policy issues; periodic staff meetings are also held at the Lab.

In short, there is considerable evidence to suggest that the Lab continually scans the policy environments in the seven states it serves. The satisfaction of the state policymakers we interviewed suggests that this scanning process is effective. Interviewees who worked at the local level indicated that Lab personnel were equally adept at listening to their needs and responding accordingly. Our sample of interviewees was, of course, small and not randomly selected so we cannot assess whether what was said would be typical of what others who have worked with McREL would say. The individuals we interviewed, however, were exceedingly positive. One indicator of the fact that this positive view is shared by others would be the willingness of state and district groups in the region to employ the Lab to do work which goes beyond what the Lab provides as part of its REL contract.

The Lab's extensive contract work outside of the region could also be taken as evidence of its responsiveness to clients. In other words, the marketplace also seems to provide an informal but never-the-less impressive evidence of the Lab's sensitivity to clients and their needs. In the area of standards-based reform, at least, the Lab's services are very much in demand both in and outside of its region. The Lab has had contracts to provide assistance in standards based reform in 33 states during the contract period and also has worked on this topic in seven other nations.

2. Areas of Needed Improvement

Although formal evaluation mechanisms are in place and appear to get implemented, a

reasonable person might infer that at least some formal evaluations are little more than “procedural display,” designed more to please (or appease) OERI and other outsiders than to serve as a source of information for altering processes or products. This judgement may be a bit harsh, but it is difficult to know what to make of a telephone interview study of The Systematic Identification and Articulation of Content and Standards, which Evaluation Brief No.98-1 indicates was designed “to assess the utility and impact of [the] standards document in school districts within the McREL region,” (p.2) but which had only an n of 11. Twenty-eight interviewees had been identified for the evaluation of this document which the Evaluation Brief No. 98-1 indicated had “been widely disseminated,” but even this small number of interviewees could not actually be interviewed, we are told, because “[u]pon calling people on the list, 14 of the people either left their position or were not available to be interviewed. Three curriculum directors preferred not to be interviewed because they did not remember the contents of the document”(p.2).

It is also difficult to imagine how the evaluation data of a pre-conference session and a one day workshop summarized in item #170 of the documents given to the evaluation team might be used to alter future presentations. The evaluation consisted of distributing questionnaires to participants; the questionnaires consisted of fairly generic items which basically measured satisfaction and participants’ perceptions of their mastery of skills focused on during the sessions. At best, these are rather gross indicators and can do little more than alert presenters of extreme displeasure among participant.

3. Recommendations

1. Make sure procedures employed in evaluations are consistent with articulated purposes.

2. Rely less on self-report data and measures of satisfaction in evaluating workshops. Just as we ask teachers to incorporate authentic assessments into their teaching (and strengthen their teaching in the process), workshop participants should be given an opportunity to demonstrate their mastery of skills taught during a session rather than simply reporting whether they believe they have achieved mastery.

III. Quality

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

1. Strengths

Quality is never easy to assess. To some extent, at least, quality, like beauty, is in the eye of the beholder. By this measure, many and possibly most of the products and services produced by McREL must be considered of high quality. As noted above, McREL's services are much in demand, both within and outside of the REL region it serves. In addition, the clients we interviewed suggested that they, at least, considered the services provided by McREL to be of high quality, in large part because McREL staff members were willing to tailor what they did to local needs.

If popularity is taken as an indicator of quality, the publications and products produced by McREL must also be considered exceptional. Major professional associations such as ASCD and the NEA have agreed to disseminate the Lab's products. Also, the *New York Times'* website is linked to McREL's site. During some months, the Lab's web site has more than one million hits, and the number of hits has been growing steadily.

2. Areas of Needed Improvement

Many of the Lab's measures of use and impact are not as sophisticated as they might be. Calculating hits on a web site tells us something, but not necessarily enough if we want to know about quality. To say something about quality, we should also know what people do when they visit the McREL web site and purchase McREL products and what impact this has on the way

they do their jobs and ultimately on student learning. To be sure, this information is difficult to gather—as the flawed evaluation efforts discussed above indicate—but McREL might use its intensive research sites to study this question in a relatively systematic way. The process used to produce “Building a System to Serve Learners: The Story of a McREL Consultant Facilitating Statewide Ownership of School Reform—July 1996-November 1997”—which involved hiring a researcher from outside the Lab to document the Lab’s work—might serve as a model for doing this. This sort of research agenda would require that the Lab modify its collaborative action research orientation for working with research sites, but Lab officials already have indicated that they have begun to rethink this matter. Conversely, OERI might want to consider supplying independent funding to study how Lab products and services are used and the impact of such use so there would be no taint of an in-house effort which might accompany the Lab funding a documentation of its own impact, even by an outsider.

At a more basic level, it should be noted that popularity and use are not the only and not even the best measures of quality. The history of education is littered with popular programs that had little or no impact on student achievement. In this regard, the quality of the Labs work—which is so very much centered on standards based reform—can be considered high only to the extent that standards based reform is a quality concept. To be sure, the notion has considerable face validity. But one could also make a case that the standards based reform movement is misguided. The long lists of standards collected by the Lab, and even the list of standards the Lab suggests is a consolidated version of the lists produced by others, bear at least a family resemblance to the long lists of behavioral objectives produced during the early and mid 70’s. Even behavioral objectives guru James Popham now admits that the extensive lists of objectives were a mistake. Popham still endorses what he calls measurement driven instruction, but he

now argues that teachers should be given a very limited number of somewhat general objectives to focus on (in the area of reading comprehension, for example, Popham recommends an objective like getting the main idea from a text), rather than overwhelming teachers with long lists of objectives which they cannot keep in mind as they plan lessons and interact with their students.

In short, for all its commonsense appeal, the commitment to standards based reform is, at this point, based more on faith than on evidence. To truly assess the quality of this Lab's work, OERI, in addition to considering externally funding studies of the impact of the Lab's services and products, should also consider funding studies of the impact of standards driven reform. Such studies would undoubtedly have to be multifaceted, since the notion of standards driven reform can mean different things to different people. Furthermore, it may be the case that such reform efforts are effective when done at the local level but not at the more distant state level, or that such reform efforts impact those who actively participate in standards development but not others within a district. Clearly, there are multiple questions which need to be investigated with respect to standards based reform, and until such questions get addressed by a neutral party in a systematic way, it will be impossible to assess the quality questions about McREL's work in an adequate way.

Most of the work of McREL is rooted in research, of course, and this research is often used as a source of legitimization for what McREL does in the field and the products it has produced. We were told, for example, that the "McREL standards," are not really the McREL standards at all but rather merely a compilation of the standards defined by professional associations and other prestigious groups. They emerge not from the minds of McREL staff but from what is referred to as the McREL data base. Similarly, the work planned in the area of

instruction is going to be grounded in and legitimated by the meta-analysis of the literature on instruction (item #170 in the Signature Work #1 packet).

Two points need to be made about the McREL research efforts which the McREL staff frequently invoke to legitimate their work. First this research is not geared toward assessing the effectiveness of standards based reform. Consequently, is not a substitute for the sort of research effort to assess the effectiveness of standards based reform discussed above.

Second, and more important, there may be significant problems with at least some of this research. It seems problematic, for example, to claim that McREL's work on standards subsumes the work of Project 2061 of the American Association for the Advancement of Science or the National Council of Teachers of Mathematics on the one hand and to argue—as is done in the Essential Knowledge book-- that many of the standards can be taught through the mastery of vocabulary, on the other. The problem here is that both organizations have explicitly downplayed the learning of specialized vocabulary in the teaching of the subjects they address. The strategy advocated in Essential Knowledge may indeed be a viable one; it is not, however, one endorsed by either the NCTM standards or Project 2061, the developers of Benchmarks for Science Literacy.

At the very least, the Lab's recent meta-analysis of the instruction literature needs to be carefully reviewed before it is used to ground and legitimate various development projects funded by federal dollars. In the past, the research done by McREL, for the most part, has not gone through the traditional quality assurance process established by the research community. I am speaking about review by and publication in quality refereed journals in the field. I realize that research journals should not be the primary publication venues for Labs. It seems reasonable to expect, however, that major research studies such as the meta-analysis of the

instruction literature should be vetted by the research communities traditional (though, of course, not perfect) mechanism for validating research before millions of federal dollars are spent on development efforts based on this research. So as not to overburden the Labs, OERI might consider accepting—and even expecting—drafts of publishable research articles in lieu of technical reports which seldom get read by many people.

Lest someone might suggest that the Lab’s own quality assurance process is a reasonable substitute for the peer review process conducted by research journals, it should be noted that the material about the QA process for the Gallup study, “What Should Students Be Taught in School? A Survey of U. S. Adults” (item #168 in the supporting documentation for Signature Work 1) is not encouraging in this regard. Most of the questions dealt with matters other than the quality of the research, and when reviewers raised significant technical issues—such as the issue about a 34% response rate—such matters were cavalierly—and, from this readers perspective, unconvincingly-- dismissed by the Gallup organization, the group which had received a subcontract to do the study. Eventually, McREL published the results of the study under the rather bold title, **What Americans Believe Students Should Know: A Survey of U.S. Adults.**

When asked during an interview about whether this and other studies might be sent to refereed journals for review, a senior McREL researcher indicated that this would certainly not be done with the Gallup study because it had serious flaws. Later he amended this statement somewhat by noting that he really did not know enough about survey research to know whether it was too flawed to be published. Despite the acknowledged flaws, however, we were told that two similar studies would be conducted in the future using the same flawed methodology so that the two new studies could be compared to the first study.

The fact that the head of the Gallup organization is also a member of McREL's board also did not inspire confidence in McREL's internal quality assurance process, especially in light of the senior researcher's admission about his inability to assess the work done by Gallup. The fact that the Gallup executive excuses himself when Gallup contracts are being discussed is only mildly reassuring, since it is not clear that anyone else on the board has the technical expertise to assess quality issues in the area of research. Indeed, the reason we were given by Lab officials for having the head of Gallup organization on the McREL board in spite of an apparent conflict of interest was that the board very much needed this person's research expertise.

In short, the data about the quality assurance process used in reviewing the Gallup survey provides little hope that this process is a viable substitute for the rigorous review of research by major refereed research journals. If anything, these data suggest the need for such review before claims about McREL's work being research based are made and used to legitimate other aspects of the McREL program of work.

3. Recommendations

1. McREL should consider using more sophisticated measures in assessing the effectiveness of McREL products and services.
2. McREL should consider using its intensive research sites as places to systematically study how McREL products and services are used and the impact this use has. This would require rethinking the Labs emphasis on collaborative action research in the intensive research sites. Alternately, OERI might consider funding other organizations to study questions of impact of various components of McREL's REL efforts.
3. OERI should consider funding studies of the impact of standards based reform in general by those who have no vested interest in demonstrating either the utility of or the problems with this reform approach.
4. McREL should submit its key research such as its meta-analysis of the instruction literature for peer review by referred journals for quality assurance purposes.

5. OERI should permit and even encourage Labs to submit drafts of research articles in lieu of technical reports which are seldom read.

IV. Utility

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

1. Strengths

As was noted above, the products and services are used extensively as evidenced by, among other things, the Lab having contracts in 33 different states and a number of foreign countries to work on standards based reform during the period covered by the REL contract. Another strength in this area is the Lab's arrangements with professional associations such as the Association for Supervision and Development and the National Education Association. The user groups we interviewed confirmed the utility of McREL services at both the state and local district levels, though the evidence from this group was less compelling about McREL products being used.

2. Areas of Needed Improvement

Less superficial data about use needs to be collected. We need to know how materials and services are used and eventually what impact such use has on the way teachers teach and how students learn. Also, care should be taken not to invoke the legitimacy of research when such invocations are not legitimate. Because it is so influential, the Lab needs to be especially careful about passing off speculation as research-based knowledge. It might be desirable to publish speculative thinking in the form of symposia to which people with different perspectives contribute or possibly as debates. During the last Congressional debate about funding research, there were complaints from Congressional staffers and some members of Congress that much

Lab and research center work was simply ideology. It is possible that if such a position is articulated in the future, some of McREL's more speculative documents might be held up as evidence to support such a view. McREL needs to be sensitive to this issue and make sure its work is not speculation or ideology masquerading as research based findings.

3. Recommendation

1. Because its products are distributed widely and its services are in demand by policymakers and practitioners, McREL has a special obligation not to misrepresent its ideas as being research based when they are not. It also should not use research which has not successfully gone through the peer review and journal publication process to legitimate its work.

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

1. Strengths

The interviewees we spoke with—both those who worked with McREL on state level projects and those who worked on district level projects—repeatedly told us of McREL's responsiveness. Only one person—from a user group outside the REL region, I should add--complained a bit about the McREL consultant being too much in demand to customize services to the extent he would have liked, but even here the criticism was mild and, to some extent, contradicted by others in his group who viewed things differently. In another group, we heard of how difficult it was to have a meeting of the minds between what the McREL consultant wanted and what the local user group wanted, but the focus of these comments seemed to be more on the difficulty of the task not on problems with McREL. Indeed, the McREL consultant seemed to be cast in the role of the hero in this person's story because she didn't give up and the story had a happy ending.

2. Areas of Needed Improvement

The Lab is so sensitive to clients needs that it even structures its research in its intensive

research sites around the principles of collaborative action research. This work, consequently, is built around the problems, concerns, and needs of clients. In some respects, this sensitivity to clients needs must be considered laudable, and to the extent that particular clients' interests and concerns coincide with the research questions the Lab needs to answer, both partners in the collaborative research process can get their needs met. The Lab now realizes that this comparability of concerns does not always happen and has begun to rethink its total commitment to using collaborative action research in its intensive research sites.

3. Recommendation

1. The Lab should continue to rethink its commitment to collaborative action research in its intensive research sites. As part of this process, it should carefully weigh its desire to be responsive to the particular clients at the intensive research sites, on the one hand, and the need to provide knowledge to the education community as a whole—another client of sorts—on the other.

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

To the extent that standards based reform contributes to improved student achievement, we can assume that the Lab's work contributes to improved student achievement. In addition, the Lab deserves kudos for linking diversity concerns to the standards movement. The Diversity Roundtable project which commissions research based papers from well know scholars and uses these both as the basis for interaction between practitioners/policymakers and these scholars during a conference and as the basis for the development of more practitioner-friendly materials seems like a good model for linking research and practice.

2. Areas of Needed Improvement

The assumption that standards based reform will lead to increased student achievement is just that, an assumption. To date, McREL has done little to assess the impact of its work on student achievement or even on significant intervening variables. Too often the measures used in evaluation and research studies are measures of satisfaction or respondents' perceptions about their mastery of the skills and material presented.

3. Recommendations

1. McREL should continue its efforts to link diversity issues to the standards movement. The Diversity Roundtable format seems an especially appropriate format for doing this and might be adapted to other Lab programs.
2. Greater attention to the impact of McREL's work on student achievement is needed; if it is not appropriate to do this at this time, better measures of impact on teachers and other key actors should be provided.

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

1. Strengths

The testimonials we heard from people in the field suggested that McREL provided significant technical support at both the local and state levels for implementing the Comprehensive School Reform Demonstration legislation in the region. This testimonial evidence can also be linked with the fact that all states in the region have now qualified for funding. Although it is difficult to determine precisely what role McREL played in the states' success, testimonial evidence suggests it was substantial. This conclusion is reinforced by the fact that all states in the region were successful, including those that are small with limited capacity for proposal development in their state departments of education.

Of course, as was indicated above, the Lab also supports state and local reform efforts in

the area of standards based education. This assistance, as already noted, has been extensive both inside the region and outside of it.

2. Areas of Needed Improvement

This Lab is heavily involved in supporting states and local districts in their efforts to reform education. What is needed is more attention to the impact of the Labs efforts--and the policies and practices it promotes--on student achievement. Unless we have this information, we cannot know if the Lab's work with the field is positive or negative. Unless a linkage with greater student achievement can be established, we can only guess at whether the reform efforts the Lab promotes are positive or negative.

3. Recommendations

See recommendation 2 in the response to the previous question.

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

1. Strengths

Our interview data suggest that the Lab has been a major player in standards based reform at both the state and local level in the region. In addition, the Lab, during the current REL contract, has had contracts to work on standards based reform in 33 states and in a number of other countries. We also saw evidence that a number of professional associations look to the Lab for assistance and materials, especially in the standards area. These data suggest that the Lab has indeed developed a national—and indeed an international—reputation in the area of standards based reform. To the extent that standards based reform can be thought of as a synonym for curriculum, learning and instruction, we can conclude that the Lab has indeed developed a national and even an international reputation in its specialty area.

2. Areas of Needed Improvement

As part of its specialty work, each Lab is expected to provide leadership in a project conducted by the Lab Network Program. The project this Lab has designed collaboratively with other Labs attempts to answer important questions about standards based reform. It is the sort of work which was called for above. It is not clear, however, that there are sufficient resources to do what is planned; at least it does not seem as if there are enough dollars available to do the study well. This does not seem to be the Lab's fault. Expecting each Lab to be involved in some way in ten separate projects may be asking Labs to stretch very limited resources too far.

3. Recommendations

1. OERI should rethink its expectations for the number of products to be produced by the Lab Network Program. Rather than expecting every Lab to lead a cross-Lab project in its specialty area, OERI might ask for a single, jointly developed project from a number of Labs with interrelated specialties. (It is possible that the expectation here is more an interpretation of OERI's expectations on the part of Lab personnel than an actual OERI expectation. If this is the case, Lab officials already have the ability to implement this recommendation.)

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

and

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

McREL has established a national--and even an international--reputation in the area of standards based research. It has provided important leadership in this area both inside and outside the seven state region it is funded to serve. The many contracts awarded McREL in the standards based reform area speak to its leadership in the standards based reform movement. Those interviewed within the region served by McREL suggested that REL dollars are funding significant standards based reform efforts within the region as well.

The evidence the evaluation panel reviewed suggested reasons for this Lab's impact in the field. These reasons include a sensitivity to clients needs and a willingness to adapt to particular contexts and the concerns of those who work in them; savvy marketing including collaborations with major professional associations which publish and disseminate McREL materials; and an ability to scan the environment to respond proactively to emerging issues (and often to reframe emerging issues so they fit into the standards based reform orientation which appears to be at the center of most Lab activities).

The challenge, at this point, is to study more comprehensively the impact of McREL's work and the ideas and assumptions which undergird this work. To date, McREL has relied a great deal on measures of client satisfaction and self report data about what was learned and the value of what was learned to assess its programs and products. It is now necessary to use more sophisticated measures, especially those which say something about the impact of what is done on student learning, or at least on the skill development of teachers and/or other key actors.

At a more fundamental level, there is a need to assess in systematic ways the utility of the standards based concept itself. Such work can hardly be done by a Lab such as McREL which has made standards based reform a centerpiece of so much of its work. Hence, OERI should consider funding more disinterested parties to study the impact of this very appealing but as yet largely unproven reform strategy.

McREL can, of course, claim that the bulk of its work on standards is research based and, indeed, at least some of its legitimacy within the field rests on such claims. The research done by McREL, however, is not intended to investigate the utility and desirability of the standards based reform concept. Furthermore at least some of this research seems somewhat problematic, and the evidence the evaluation team reviewed suggests that the Lab's rather extensive quality

assurance process may not be adequate to deal with technical questions in the research domain. It is recommended that, for key research documents, the Lab rely on the traditional process employed by the research community: peer review by and publication in major research journals. So as not to add to the burden of Labs whose major mission is not to publish in research journals yet still make it feasible for Labs to take advantage of this established quality assurance procedure, OERI might accept drafts of journal articles in lieu of technical reports which all too often do not get read.