Developing Schools' Capacity for Evaluating Technology Projects: Lessons Learned from the North Carolina IMPACT Schools

A report from

Looking at North Carolina's Educational Technology (LANCET),
a partnership of the
North Carolina Department of Public Instruction,
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In 2002, the North Carolina Department of Public Instruction (DPI) initiated an innovative and ambitious program for improving student learning through the effective use of instructional technology. Until that point, most technology projects in schools were geared toward integrating technology into the curriculum, and they tended to focus on professional development for teachers and the acquisition of equipment. Evidence that technology integration was making a difference in student learning was limited. In the belief that technology can be a catalyst for improving student outcomes, and armed with a sound understanding of the research on school improvement, DPI developed the IMPACT model for schools. The model goes beyond traditional approaches to technology integration by encompassing all of the elements that research suggests are components of an effective school-based technology and media program: leadership, collaboration, professional development, a media coordinator, a technology facilitator, flexible scheduling, infrastructure, resources, evaluation, and an adequate budget. To pilot the model, DPI took the bold step of using their funding from the Enhancing Education Through Technology (EETT) component of No Child Left Behind (NCLB) to award IMPACT grants to eleven resource poor schools across the state. Each of the eleven grants was for three-years and 1.5 million dollars, which provided the IMPACT schools the time and resources they would need in order to fully implement the model.

With such a heavy commitment of resources to individual schools, educators and policymakers in North Carolina - and across the nation - were interested in finding out whether the IMPACT model does indeed improve student learning. Thus, in 2003, DPI sought and was awarded a grant from the U.S. Department of Education (ED) to study the implementation and impact of the model. *Looking at North Carolina Educational Technology (LANCET)* was one of ten research projects supported by the Evaluating State Educational Technology Programs (ESETP) initiative. DPI's partners in the LANCET study were the Friday Institute for Educational Innovation at North Carolina State University (NCSU) and the SERVE Center at the University of North Carolina at Greensboro (SERVE). Researchers at NCSU conducted experimental and quasi-experimental research on several aspects of the IMPACT model, including the effect of the model on student achievement. SERVE's role in LANCET was to help the IMPACT schools develop the internal capacity for conducting formative evaluation of their individual projects, focusing on uses of data to make decisions for improving the implementation of their projects. The purpose of this document is to share insights into and lessons learned from SERVE's work with the IMPACT schools as they implemented and evaluated their projects.

To help the schools learn how to plan and conduct the evaluation of their IMPACT projects, SERVE provided professional development, technical assistance, and resources to school teams. To support the work, SERVE developed the *Capacity for Applying Project Evaluation (CAPE)* suite of resources and tools, which includes an evaluation framework, a compendium of evaluation instruments, and a professional development model geared toward capacity building

(http://www.serve.org/Evaluation/Capacity/). With additional funding from the Microsoft Corporation's Partners in Learning (PIL) program, SERVE was able to expand the CAPE model and services to educators in other states and to study how IMPACT school administrators' and teachers' evaluation skills and understandings changed, how individuals and organizations responded to the evaluation capacity-building effort, and what factors seemed to influence the schools' capacity for planning and conducting formative evaluation.

Conceptual Framework

In developing CAPE, SERVE delved into the research literature on school change, the adoption of educational innovations, and capacity building. The following table illustrates how changes in schools are influenced by three driving forces: engaging moral purpose, understanding the change process, and building capacity. Capacity building is in turn dependent on the extent to which educators' knowledge, skills, and attitudes are changed, resources are available and utilized, educators engage in a professional community around the innovation, the program is coherent, and leadership is shared among key players. Note that the professional literature addresses innovations in general; for CAPE, the innovation is the capacity for project evaluation.

<table>
<tr><td rowspan="7">Foundation Drivers for Change in Schools

The desired change is defined as the adoption of an innovation.

(Fullan, 2005)</td><td colspan="3">1. Engaging Moral Purpose
Engaging teachers' beliefs; the need or motivation to adopt the innovation (Fullan, 2005).</td></tr>
<tr><td colspan="3">2. Understanding the Change Process
Engendering ownership of changes necessary to adopt the innovation (Fullan, 2005; Hall & Hord, 1984; Horsley & Loucks-Horsley, 1998; Rogers, 1995; Marzano, R., Waters, T., & McNulty, B. (2005).</td></tr>
<tr><td rowspan="5">3. Building Capacity
Collective and ongoing policies, strategies, resources, and other actions to increase organizational power to adopt the innovation. (Newmann, King, & Young, 2000, as cited in Fullan, 2005, p. 40)</td><td colspan="2">A. Knowledge, Skills, and Attitudes of Individuals
(Guskey, 1986, 2000)</td></tr>
<tr><td colspan="2">B. Resources – infrastructure, tools, people, money, time necessary to adopt the innovation.</td></tr>
<tr><td rowspan="3">Shared Identity
Motivation to work together to further adoption of the Innovation. (Fullan, 2005)</td><td>C. Professional Community
(Wenger, McDermott, & Snyder, 2002)</td></tr>
<tr><td>D. Program Coherence
(Newmann, Smith, Allensworth, & Bryk, 2001)</td></tr>
<tr><td>E. Shared Leadership
(Lambert, 1998, 2002)</td></tr>
</table>

CAPE Conceptual Framework

The elements of this conceptual framework provide a basis for thinking about building capacity for project evaluation and about promoting changes in practice. Fullan (2005) explains the engagement of "moral purpose" as the activation of a) educators' fundamental beliefs about what is valuable for children and b) educators' ownership of the desired change. In the case of many educational technology projects, this means that an important factor in a project's ultimate success may hinge on whether a) teachers believe that the innovation will benefit their students and b) the extent to which teachers see themselves playing a role in realizing those benefits. It is equally important that the people involved in a project understand that they are going through a change process; the better prepared they are for the change, and the better they understand the process they are going through, the less likely they may be to resist the change.

The framework expands the concept of capacity building beyond traditional notions of increasing knowledge, acquiring skills, and changing attitudes to promoting and supporting the actual *use* of the knowledge, skills, and attitudes, along with the use of necessary resources. A final crucial aspect of capacity building is shared identity or collaboration, in which parents, students, teachers, and administrators are mutual learners and leaders, and in which everyone has a shared vision of how the project works in order to achieve the desired outcomes.

Lessons Learned

In order to understand educators' perceptions of their experiences in developing the capacity for project evaluation, SERVE implemented a series of site visits and conducted focus groups and individual interviews with key participants in the IMPACT projects. The observations and lessons learned presented here derive primarily from a content analysis of the qualitative data from the focus groups and interviews. Focus group participants and interviewees included project management team members (school administrators, technology facilitators, media coordinators, classroom teachers, and in some cases, a district technology staff person) as well as members of the IMPACT schools' staff who participated in, but were not directly involved in, managing their IMPACT project.

Lessons are overarching insights into what might be learned about capacity building for evaluation in the IMPACT schools. **Suggestions,** which go beyond the data, are an attempt to translate the lessons and insights into practical steps that school and district educators might find useful in their own projects. **Observations** capture Ah ha! moments from SERVE's professional development and technical assistance work with EETT schools. **Recommendations** are offered to funding agencies and policymakers to help them effectively plan evaluations at a program level.

Lesson 1: Different stakeholder groups see different purposes for the evaluation of educational programs and projects.

At the federal level, policymakers tend to see evaluation as a means for gathering evidence that a program is meeting its goals and that the money is being spent as Congress intended. At the state level, program leaders are often under pressure to provide data to the federal, and sometimes state, government to show that the priorities are being addressed and program regulations are

being followed. At the same time, state-level program leaders want data they can use to ascertain how well projects are being implemented in local education agencies, which project processes and strategies are the most effective, and how the projects are perceived by administrators, teachers, and the community. University professors and other researchers who conduct external evaluations are interested in contributing to the professional knowledge base and literature by investigating how particular educational strategies impact student outcomes. All of these varying purposes for evaluation are fine and good, but school-based educators do not see much relevance for themselves and their schools. What matters most to teachers and principals is getting the most out of the evaluation in order to benefit their students. Teachers, in particular, are generally less than enthusiastic about doing evaluation for the sake of accountability or research, but if they believe that a particular innovation or strategy will benefit their students, they are more likely to be willing to actively participate in its evaluation.

According to many textbooks, the purpose of an evaluation is *formative*, i.e., intended to help managers monitor and adjust their project in order to improve its effectiveness, or *summative*, providing data that funding agencies use for making decisions about whether to continue financial support. Schools should collect and use data formatively to ensure the successful implementation of their projects; state education agencies need summative data they can use to decide whether to continue funding the projects; and the federal government needs summative data they can show to Congress as evidence that the goals of the federal program are being addressed. Problems can arise when the needs and interests of the stakeholder groups are in conflict. For example, a funding agency might require specific kinds of data to be collected by a particular instrument. To ensure that they get the data they need, the funding agency might require that the project evaluation plan they have approved be implemented as planned. In the real world of schools, however, educators who are collecting data to use in making programmatic decisions need some measure of flexibility in collecting data and implementing the plan.

At the project level, teachers and administrators also need to understand why they are collecting data, what project leaders expect to learn, and what is going to be done as a result. Ultimately, if you want to build capacity for evaluation in schools, the most valuable (or *moral*) purpose for evaluation is to arm decision-makers with the data they need so they can get the most out of their project in order to benefit students.

> **Suggestion –** *For educators in schools, learning how to use evaluation data is more important than learning how to develop and implement plans.* When planning professional development aimed at helping schools develop their capacity for evaluation, don't base the activities on helping participants learn how to evaluate their projects. Rather, approach the professional development as a means for helping project teams get the most out of their projects. In the end, it isn't about evaluation; it's about doing what's best for students.

Informants, i.e., those who are asked to provide data, may be more likely to spend valuable time completing surveys, participating in interviews or focus groups, or providing samples of their work if they see the value in doing so. One educator said: "We were … told what to do but really, it would have been better to have an understanding of why we were doing what we were doing or…given any suggestions of what we could learn from this." Since the success of any

project evaluation rests on having access to the necessary data, the first and best step to assure that project participants actively support evaluation efforts is to make sure they understand that their efforts will ultimately benefit students.

> **Suggestion** – *Provide feedback to stakeholders based on data collected.* One time-honored way to encourage project participants and stakeholders to provide data is to provide them with summary reports and feedback based on the data they provided. People want to know that they are contributing—that the information they provide actually matters. Often, they want to know how their responses compare to those of the larger group. This strategy also allows those providing data to use that information for their own formative purposes. A classroom teacher's explanation illustrates this point: "I think sometimes if we can know the results of the evaluation it would help us…[to] can change things or make suggestions as to how things could be improved or whatever…if we know other people's opinions."

Lesson 2: Language matters.

As a profession, education is notorious for its jargon. Not only do we create terms and acronyms that are seldom used by the general public (e.g., AYP, IEP, EETT), but also use terms differently among ourselves. Consider, for example, the term *evaluation*. For educational program leaders, an ***evaluation*** is generally accepted to be an assessment of the quality of a program or intervention, based on rigorous and systematic collection and examination of appropriate data. Classroom teachers and school administrators, however, often associate evaluation with "grading"—assigning values to reward good work or punish poor performance. If schools are to build their capacity for evaluating educational programs and projects, it is crucial that teachers and administrators understand that evaluation of educational projects is about collecting and analyzing data in order to make good decisions about what is or is not working, rather than making judgments about whether the school, teachers, and students are good or bad.

Consider also the practical aspects of the language of evaluation. One of the best approaches to building capacity for evaluation is for teams of educators to work together. But what happens when individual team members use terms differently? For example, the term "benchmark" can have a variety of meanings. If an administrator who has studied evaluation in graduate school is asked to define the term "benchmarks," she might say something about specific levels of quality used as targets or points of comparison for data. If a classroom teacher or principal were asked to define *benchmarks,* they might think of a product called Benchmarks, which is a published series of student assessments. Conversations among educators with these very different points of reference can be confusing and frustrating. The lesson learned from the IMPACT schools is that it is less important that everyone involved in an evaluation have the "right" definition of any particular term (e.g., *goal*, *objective*, *standard*, or *indicator*) than it is that they all use the **same** definition.

> ***Suggestion*** *– Early in the project, establish and maintain a "team glossary," created by the group responsible for managing the project and its evaluation.* As terms come up in planning conversations, note them on poster paper, white board, or an electronic file, and

take the time to discuss, select, and record a shared definition of each. Keep the glossary current and available for reference by everyone working on the evaluation.

Lesson 3: It's important for all of the players in an evaluation to understand each other's roles.

In the case of large statewide programs such as the IMPACT initiative in North Carolina, individual schools could be participating in more than one evaluation. Like the other ESETP projects, the IMPACT schools participated in multi-faceted experimental and quasi-experimental research efforts as well as the formative and summative evaluations of their projects. In addition to the NCSU researchers and external evaluators, the schools were visited by DPI consultants whose role was to help the schools implement the projects, and SERVE staff whose aim was to help the project teams with formative project evaluation. Frequently, the teachers did not understand who the individuals were, the organization they represented, or their purpose for being in the school. All they knew was that they were being asked to provide data, which meant extra time and effort on their parts. Given the complex nature of the statewide initiatives, and given the fact that schools often experience high turnover rates in personnel, it's crucial to clarify for everyone – especially the principals and teachers – the roles of the respective organizations; the roles of, and expectations for, everyone involved; who is collecting what data; and what will happen with the data. If at all possible, this information should be provided as early as possible, and there should be updates as the program evolves and as new personnel come on board.

> ***Suggestion*** *– Clarify the roles and responsibilities of all individuals participating in evaluation activities at all levels, and have a plan for making sure that they are understood by all involved.* An external evaluator hired by a funding agency and charged with ascertaining project accountability will be received by a school principal differently than one voluntarily contracted by that same administrator to help her school replace intuitive decision-making with evidence-based planning. In the same vein, a university professor contracted to observe specific classroom teaching strategies in order to study their effect on student achievement will have a very different relationship with teachers than will a professional development coach who works with the teachers on the use of student data for improving instruction.

Lesson 4: The time that teachers have for working on a project evaluation is limited.

Principals and teachers often question whether the benefits of planning their project evaluations, collecting data, analyzing data, and reporting the results are worth the time and energy required, especially when they have a plethora of other priorities, such as meeting the requirements of No Child Left Behind. Classroom teachers are especially concerned about how time spent on the evaluation might detract from working directly with their students. Principals, in turn, are concerned about teachers being overwhelmed with the "additional" responsibilities.

If project evaluations are conducted completely by project staff—defining an *internal evaluation*, in contrast to an *external evaluation* managed by outsiders—the question becomes, "Who is

responsible for data collection and other activities?" There may be a tendency for these responsibilities to be pressed onto teachers, since they are either the source of useful data or have access to the sources, such as students, student activities or products, or parents. This becomes a very real management challenge for administrators, who are leery of imposing on already-busy educators.

> ***Suggestion:*** – If steps have already been taken to assure that teachers and administrators recognize the value of the evaluation effort in which they are being asked to participate, their actual participation might not be perceived as an imposition. If educators do feel imposed upon, however, it is a good idea to *use time that has already been dedicated for planning and decision making activities, such as school staff meetings, for completing surveys, reflective journals, activity checklists, or other data-collection instruments*. As one of the IMPACT teachers explained, it is a good way to "recognize the demand for time imposed by evaluation activities and respect participants' need for time."

Lesson 5: Developing the capacity for formative evaluation can change not only projects, but also the people implementing the projects.

In the interviews and focus groups conducted by SERVE, most of the IMPACT schools reported making changes in their project implementation as a result of the findings of their evaluation. They also described changes in their evaluation skills and in understandings, attitudes, and behaviors related to evaluation. Many expressed an increased understanding of aspects of evaluation processes. Interviewees and focus group participants indicated they had a better understanding of differences in, and purposes for, summative and formative evaluation. Many also felt as though they had gained understandings of the various data-collection tools that might be used to evaluate technology projects in schools. Staff members reported that they will likely use at least some of what they learned about formative evaluation in the future, to help them make adjustments to their projects.

Interview and focus group data revealed that the collection of data examining the quality of their project implementation made teachers more attentive to particular aspects of their instructional practices, particularly if the data collection methods included a reflection component, such as journals or activity logs. These changes in teacher focus seem to be a result of evaluation activities heightening teachers' awareness of particular practices, making them more conscious of their performance and more likely to adapt it to expected outcome standards. One teacher interviewed explained that, because she was asked in a survey about how often she used a particular strategy, she asked herself, "okay—how can I incorporate that into my lessons more?"

Influences were also seen in terms of student assessment or in teachers' use of data to inform their own instruction. For example, one teacher learned how to design and use rubrics as part of her school's project evaluation, then used her new skills to assess student performance. As an educator said, "You do a unit and you ask yourself, you either say - I'll never do that again or that was really great but I need to do this part different… I think this has taught me to write it down, make a record…which I don't know if I did before."

Suggestion: Organizational change is highly dependent on change in individuals, and change in individuals can be, but does not have to be, difficult. It helps tremendously if those who are involved understand the nature and scope of the changes in both the program and (potentially) themselves. In retrospect, the IMPACT teams would have been well served if they had had *a framework for monitoring, thinking about, and discussing the changes they and their schools were going through*, such as the Concerns Based Adoption Model (Hall & Hord, 1984) or Fullan's (2001) work related to leadership and change.

Lesson 6: In developing the capacity for formative evaluation, teachers and administrators do not need to become evaluation experts, but they do need to develop specific evaluation skills.

Although school-based project evaluators do not need to become experts in evaluation designs or methodologies, it is helpful if they learn to focus the scope of their data collection efforts on answering the key evaluation questions. Particularly with increased emphasis on measurable student achievement and the advent of current technologies, educators tend to collect too much data in the course of doing an evaluation, rather than not enough data. In the focus groups and interviews, when educators were asked what they would do differently if they had their evaluation to do over again, many recommended simplifying their data collection: "I think we would narrow our focus on the kinds of things that we need to look at…And I don't think that I would try to collect everything all at once." A good mantra for data collection is "collect all of the data you need and only the data you need" in order to answer the evaluation questions.

To enhance the rigor of an evaluation, much of the professional literature on evaluation methods encourages the use of multiple measures for collecting data about a particular subject of inquiry, which is referred to as the *triangulation* of data. However, for the purposes of a school-based formative project evaluation, project leaders should consider whether that increased rigor outweighs the costs of collecting, organizing, and analyzing additional data. Our experiences with schools tell us that sometimes it is not worth the extra effort. School staff can often find out what they need to know from a single, reliable data source. We have also noted that it is possible to "go to the well" too often, upsetting project stakeholders by asking them to provide the same data for multiple evaluation efforts.

***Suggestions** – Rather than adding a lot of data collection procedures, try making simple adjustments to data already being collected.* It may be useful to adjust existing data collection processes (e.g., surveys, professional development questionnaires, student assessment, resource management records) to maximize their usefulness for the defined evaluation purpose. Add a few items to an existing school staff survey rather than creating an entirely new one, or modify an established rubric used to assess student products to address specific desired outcomes. For example, when faced with the challenge of assessing teachers' use of specific technology in their teaching, one school project team looked to lesson plans as evidence, and discovered that by making a few simple adjustments to their existing lesson plan template, they could easily use it as a data source for assessing teacher technology use.

> Also, take a look at the data from *integrated learning systems (ILS)*—software programs that adapt instruction or practice to individual students based on their performance. These systems collect student performance data that can be configured to report the results at the student, class, or school level. If teachers and administrators develop the skills and understandings necessary to analyze, interpret, and apply this wealth of information, ILS data can be effectively used not only to modify instruction, but also to support a variety of evaluation purposes.

Teachers and other staff members involved in the evaluation need training and support that will help them build the knowledge and skills that will enable them to successfully identify appropriate instruments, complete surveys, collect and organize necessary data, analyze that data, and then interpret meaning from the analysis. In large programs such as the IMPACT program, where there are a variety of organizations that can offer support (DPI, SERVE, NCSU), the project teams need to know who can help them and how to engage their assistance.

> "Teach us how to collect data that will support that what we are doing is actually bringing about our goals," one educator said. Another recommended providing professional development that addresses the following questions "How do you analyze data? If you collect data that says our lab is used by 150 students in the course of a week, what does that tell you? What should you look for? If lab use is what you're studying, what should you look for…?"

In some respects, teachers are already attuned to the notion of collecting and analyzing data; they just don't think of it as evaluation. We often heard educators use the expression *monitor and adjust*, i.e., monitor the effectiveness of instruction, and if a particular strategy isn't working, adjust it so that students can learn better. This is actually formative evaluation—but implemented informally, in real time, on a smaller scale than is typical in a project evaluation. Many teachers who participate in project evaluation will come to understand this: "The whole evaluation process is so commonsense, but not something I had ever done before. I think I did it but not necessarily formally." Project leaders can help teachers and administrators who have not already adopted this way of thinking by showing them comparisons between project evaluation and the work that educators do in schools every day.

By talking with others, educators usually have ideas about "how the project is doing," but these conversations are a type of "informal data." Oftentimes, the only difference between informal and formal data is that the latter is recorded for future reference and analysis, whereas the former exists only in memory, which runs the risk of loss or misinterpretation. Some of the IMPACT schools adopted strategies for tracking and organizing informal data, such as keeping a log of informal hallway conversations or developing rubrics or checklists based on standards to assess quality and document performance.

At some point, the key question becomes, "What do the data mean?" Learning how to collect data isn't all that different from what teachers normally do on a daily basis. Learning how to analyze and interpret the data is a whole new ball game. One of the many benefits of having a

project management team is that the individual team members bring different perspectives and insights to discussions about what the data mean and what should be done as a result.

Lesson 7: Success in implementing a project evaluation—and likely of the project itself—depends in large measure on participants sharing a sense of identity around both the project and the evaluation.

The IMPACT schools that were the most successful in implementing and communicating project evaluation processes and results generally seemed to be those where project participants and stakeholders had a good understanding of, and active involvement in, the evaluation. By involving project participants and stakeholders in the initial planning of both the project and the evaluation, teams can improve the quality of the evaluation and increase buy-in for activities that require the commitment of time and other resources. If it is not feasible to include all key stakeholders during the initial process, the next best option is to communicate with them soon after the planning and before the implementation. As one evaluation team member reported,

> "I think it helped us not to just look within our school but it was an extension to look into our district and our community to make sure that all stakeholders were involved, not just the teachers and the students, but make sure the parents were also involved."

Since formative evaluation is about helping project leaders monitor and adjust their project in order to maximize its effectiveness, an important first step in developing a viable evaluation is to ensure that all stakeholders involved have a good understanding of the project. It is important to bear in mind, however, that when evaluation is being conducted for formative purposes, the people involved in the project and its evaluation are likely to have a vested interest in the results. Data collection can be an emotionally challenging activity as project participants are asked to think and report critically on their—and others'—activities, perceptions, and performance. Egos may be threatened if they are associated with specific project strategies, or issues of power (e.g., control of resources) may arise. Project leaders can play an important role in minimizing some of these challenges by creating an environment in which individuals associated with a project and its evaluation feel as though they are "in it together"—that they are members of one community and share the same understandings about project strategies and expected outcomes.

One way in which IMPACT schools were able to clarify their project activities and desired outcomes, and to build consensus among project stakeholders was by developing a *logic map*—a graphical representation that illustrates how their project works. As one respondent noted, "I liked the logic map because it was a visual thing and you could see how it all goes together."

Through the logic mapping process, individuals involved in implementing the project evaluation are able to come to a shared understanding of what successful, quality implementation of project strategies looks like. Similarly, through this process, project participants and evaluators can reach common understandings of what outcomes (*objectives* or *goals*) are expected—or hoped for—as a result of implementing those defined strategies. More subtle, but of equal significance, is that all those involved have a shared understanding of how resources and strategies are expected to translate into the desired outcomes. Evaluators describe this as *project logic*—the

sum of various semantic, cause-effect or if-then statements that link project activities and results. When participants and stakeholders take the time early in the process to develop a shared understanding of what the project is going to do and what it is going to accomplish, the potential for misunderstandings and frustration can be greatly reduced.

> ***Suggestion*** *– If logic-mapping strategies are thought to be valuable, apply them early in the project planning process and with enough flexibility that planning teams can illustrate their collective understanding of how their project works.* It is not enough to simply require or provide preferences for a logic map (e.g., as part of a project proposal or program-level evaluation guidance). Logic maps are valuable primarily for the process of developing them, not for their mere existence. Their value is greatest if they influence project *planning, implementation, and evaluation*—as opposed to just evaluation—so project teams should map logic at the earliest possible point in project development. Logic maps should be revisited regularly, updated as the project and its evaluation evolve over time, and shared with all project stakeholders.

From the IMPACT school data, we learned that while it may be tempting to provide templates or required formats for logic maps in an effort to simplify the process, this approach may in fact overtax or get in a team's way, preventing them from developing a logic map that reflects their personal ideas of how strategies connect with objectives. While it might be helpful for teams to see a variety of logic mapping formats in order to get an idea of what they look like, imposing a mandate that they develop a logic map using a particular format might result in participants viewing the map as something to be completed—an artifact—rather than as the living planning document it should be. The important thing is that the logic represented in the map be sound and accurately reflect what the project is going to do and what its outcomes will be.

Another successful strategy some of the IMPACT schools utilized in implementing their project evaluation was to share tasks among team members. As often occurs, when provided with the opportunity to share leadership responsibilities, educators who were not in positions that are traditionally associated with leadership, such as teachers or technology facilitators, often assumed leadership roles in their project implementation and evaluation. Differences in perspective often lead to evaluation questions that might have otherwise been overlooked, offer a broader base of experiences on which for interpreting the evaluation results, and help tailor communications to the various needs of audiences interested in evaluation results. One evaluation team member commented,

> "The process, too, of having the teachers in there with us instead of it just being the tech facilitator, the media specialist, and the principal, who have those bigger administrative roles as opposed to those teachers that are doing the day to day getting to the grind of things, they helped keep us grounded."

> ***Suggestion*** *– Develop a plan to actively share project and evaluation plans, activities, and results with stakeholders.* Even when the majority of the evaluation activities are being led by a small team, communicating regularly with participant and stakeholder groups about the evaluation—including important questions, implementation progress,

data findings, and decisions—is likely to increase school-wide understanding and support of the project and its evaluation.

Lesson 8: Communication is the glue that holds a project evaluation together.

Communication is crucial to all aspects of successful project evaluation, whether it be for building a sense of community and buy-in, engaging participation in the evaluation, or sharing the results. The IMPACT schools used a number of strategies for communicating with staff throughout the project and evaluation, including whole schools meetings, dedicated time at weekly staff meetings, MTAC committee members and Team Leaders serving as liaisons between teachers and evaluation leaders, informal hallway conversations, and email. Whatever set of communications strategies were put in place, schools that communicated intentionally, frequently, and consistently about the project evaluation generally felt that they had a better understanding of their project. One educator illustrates this:

> "We lead the way by making sure that information is communicated to all areas…then the IMPACT committee, as we share that information with them, they, in return, take that information back to their grade level, to their respective grade levels, so we make sure that the line of communication is shared throughout the school so it doesn't just stop with the IMPACT core team or the IMPACT team, or even the grade levels, because the teachers also, in turn, share with their teacher assistants. So, there's sort of a line of communication that goes threaded throughout the whole process as far as information goes."

> ***Suggestion*** – Early in the project, *set aside time for the project team and school staff to discuss the best ways of communicating* and to ensure that communication is meaningful and timely. Also, check to be sure that all of the stakeholders in the evaluation can and will participate in the designated lines of communication, e.g., that they will use email or digital discussion forums. From time to time, check to see how well communications are working. Are teachers getting the information they need? How about other stakeholders?

The IMPACT schools felt more prepared to cope with evaluation tasks when they were well-informed in a timely manner about their roles and responsibilities and when provided with enough knowledge and skills to complete their expected tasks. Thus, it is important to plan communication not only within the schools but also among the schools and between the schools and program managers within the funding agency.

Lesson 9: One size evaluation does not fit all.

When we began working with the IMPACT schools, we thought we would be doing the schools a service by helping them learn how to plan and conduct formative evaluation of their technology projects and in so doing would help them develop capacity for evaluating any educational project. An underlying assumption was that most schools, especially those with limited resources, have little or no capacity for formative evaluation, i.e., formative evaluation in

the way that researchers and evaluators think about it. It turned out that most of the schools were doing evaluation in a variety of ways: collecting data for monitoring and adjusting classroom instruction, for accountability, for grant-funded projects, or in conjunction with the School Improvement Plan. In retrospect, we realize that if we had taken more time at the beginning of the process to fully understand each schools' beginning level of capacity, the nature and scope of educators' expertise, their school's culture and operating style, and their specific needs, we could have built a measure of flexibility into the evaluation model and tailored the professional development and technical assistance in ways that would allow schools to more easily adopt or adapt the evaluation for their particular situations – what we have come to think of as *developmentally appropriate evaluation support*. Recognizing the evaluation work they are already doing conveys respect for the school, for the individuals involved, their knowledge and experience, and on-going efforts to improve their school projects for the benefit of their teachers and students.

Another important aspect of the "One size doesn't fit all" lesson is that when schools are adopting an evaluation model or evaluation instruments, there's a good chance that they make modifications. For example, they might combine steps in a multi-step process, develop their own instruments, or change items on an approved instrument. On one hand, these modifications can increase ownership of, and participation in, the evaluation by teachers and administrators. On the other hand, the modifications can play havoc with fidelity of implementation.

> *Suggestion:* Before asking a school to adopt a new model or new instruments, *take time to find out what is working*, what constraints they might face, and what evaluation efforts they are able to take on; then provide evaluation support to meet their needs.

Observations

In working with EETT grant recipients in Mississippi as well as North Carolina, SERVE staff had a couple of important realizations. The first is that building capacity for project evaluation requires a lot more time, energy, and resources than traditional methods of professional development and technical assistance provide. Academies, institutes, workshops, and meetings, are fine, but what often makes the difference between great, moderate, or limited success is on-going guidance from someone who has expertise in evaluation and who understands and appreciates the cultures and exigencies of schools. It helps if the guidance is provided on-site as well as electronically.

A second major observation is that if you want to help schools and districts develop and sustain the capacity for planning and implementing good project evaluations, always keep in mind that the focus of the effort should be on them and their projects, not on you, and not on learning how to do evaluation. Learning how to evaluate a project is not high on many teachers' and administrators' priorities; however, learning how to get the most out of finite resources so they can derive the most benefit for their students is a very high priority. In the end, it is not about project evaluation per se; it is about supporting the underlying purpose of the evaluation – educators having solid information and tools they can use in making sound decisions for

improving their projects, which translates into more effective teaching and improved outcomes for students.

Recommendations

Fullan (2005) suggests that in order for capacity building to be sustainable, it needs to be tri-level, i.e., to take place at the school, district, and state/federal levels. The lessons learned from the IMPACT schools suggest that there are certain things that policymakers and administrators at the state and federal and state levels can do that will ultimately improve their capacity for planning, conducting, and communicating the results of project evaluations.

Program: Setting the Evaluation in a Context. Perhaps the most important thing that federal and state program planners can do for grantees is to make every effort to ensure that the grantees understand the purpose of the overarching program (beginning with the federal statute and the U.S. Department of Education's priorities), see how their particular project fits into the overall program, and appreciate the importance of their formative and summative project evaluations. It would save the would-be evaluation team a great deal of time, frustration, and angst if evaluation were built into the overall program design and if all of the varying purposes for the evaluation were identified and addressed at the outset, i.e., as the program is being designed. It would also facilitate matters if the program design were to include (a) the purpose(s) of the evaluation; (b) expectations for the scope and nature of the evaluation, i.e., formative and/or summative, internal and/or external; (c) components of the project evaluations, such as evaluation questions, data sources, methods for data analysis, timeline; (d) roles of various stakeholders in planning and conducting the evaluation; (e) expectations for reporting the results; and (f) anticipated uses of the results.

Expectations. All too often, funding agencies are disappointed with the quality of the evaluation plans in grant proposals and the quality of evaluation reports. This problem can be ameliorated somewhat if the Request for Proposals (RFP) or Grant Application Package outlines the agency's expectations for the evaluation and provide enough structure such that inexperienced evaluators can develop a sound plan, but allow flexibility for the applicants to tailor the evaluation to their particular projects. A lot of time and energy could be saved if the RFP referred to specific data collection instruments that grantees can use for their project evaluations - so they won't spend time developing their own instruments.

Communication. Evaluation guidance or requirements are commonly passed downward from federal program officers, through SEA administrators (often multiple levels of them), to district administrators, and ultimately to school staff members. Project goals and objectives, management expectations, accountability requirements, and expectations of dissemination must be effectively communicated through all these levels. Similarly, evaluation data and findings are typically reported upward through those same levels and must be communicated consistently and in ways that meet the needs of each successive level of management. Communication among all these various levels must take place in ways that are timely—and timed—to effectively engage stakeholders in the evaluation and thus ensure the effective implementation of the evaluation.

Developing a plan for communicating with all stakeholder groups before project implementation begins and that encompasses new knowledge, roles and responsibilities, pathways and preferred methods for communication will go a long way in reducing confusion and unmet expectations, and toward gaining buy-in, understanding, and engagement.

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