

---

## Discussion

**Sears.** The MEP evaluation system is much larger than just the few NIST evaluation team members located in Gaithersburg. We do have the NIST MEP evaluation staff, but we also have dozens of additional people scattered across the country in Centers, universities, and elsewhere doing evaluation activities. One of the interesting – and heartening – things I’ve learned at this meeting is that there’s a lot more alignment within this entire evaluation community today than there was in the past. I think that’s good. I was also glad that we had Michael Scriven come in here and shake us up a bit by taking an outsider’s look at the whole MEP evaluation system.

**Estes.** From a center director’s perspective, specifically our center, I’m concerned about our position with our state stakeholders, and figuring out how to make the state a more active participant in the planning and execution phase. Once we transition into the sixth year, the state may be the largest stakeholder from a funding standpoint. MEP may be the third largest stakeholder, if you consider the manufacturing customer in combination as the second stakeholder. From my center’s standpoint, we view ourselves as a state economic development agency, not a consulting firm. What we do as a center must fit into what the state is doing. This has to be a component of the state’s economic development plan. Here is an example. We were on a visit with the General Accounting Office (GAO) when they did their study of the impact of industrial extension. We went to a South Georgia firm near Plains, Georgia--Jimmy Carter territory. This firm was involved in agricultural processing of peanuts. We worked with company to help design a

crop dryer because the company’s current dryer was too noisy. Our engineer worked a couple of days on the design. The company seemed to like it. The GAO visitor asked the company, “What would have happened if the folks from the MEP center had not been here to help you?” The client said, “I guess our people would be waiting for the check to come in from the government.” Our center is about economic development. Our first priority is from the state perspective.

From the overall system perspective, keep the evaluation system simple. We have a tendency to get too complex, to do too many things. You’ve mentioned problems of centers having trouble collecting data, and we’re one of those centers. One problem is resources--we can either put money into reporting infrastructure or into delivering services. We have a certain amount of resources for R&D, a certain for marketing, etc. Some of the things coming from NIST MEP require too many resources. We’re at the point of declining government revenue. We have the challenge to retain capacity. We’re making some progress in getting other sources of revenue. But to maintain capacity, we’re having to chop things out of our center that add value because we don’t have the money to support them. NIST/MEP needs to be careful about what information we ask for from the centers.

The concept of intermediate outcomes is important. We have to take some firms through building blocks to produce change. I encourage participation of center directors in designing metrics. There are many stakeholders. Let’s see what we need from each stakeholder and look for the overlap.

The validity of the data points is another issue. We depend on external specialists and NIST to provide expertise

---

to analyze the data because we don't have that infrastructure in-house.

**Thompson.** I have three broad comments. I'd like to come out of this meeting with more positive feelings. We're beating ourselves up over low numbers. A lot of programs play games with numbers that we're too honest to play. Maybe we dwell too much on the fact that our numbers aren't what we want them to be but at least we have honest numbers. Thirty-two percent of clients check boxes indicating that we're having an impact; 68 percent do not indicate an impact. I think one problem is that the questions are not capturing the impact.

When I was a center director, I reviewed our Census survey results and I found that in many cases when the company indicated no impacts, the company would turn around and describe impacts from our services in open-ended questions. We need to come up with a way to measure the value of ISO 9000 implementation, the value of meeting environmental regulation, the value of agreement with disaffected workforce, and the ability to value new product development services. We have a table that shows that new product development has the greatest anticipated impact but it takes a long time to see these impacts. We need to do a better job capturing this. If our idea that here's one survey and here's one job total that describes the outcomes from our program, we're shooting ourselves in the foot.

I love the phase actionable insights. I'm skeptical that most of these insights we need will come from the evaluation system. There's stuff we need to know--special issues such as the impact of environmental non-attainment. What's the impact of that going to be? It is likely to be more regulations imposed on

manufacturers. But this evaluation mostly comes up with things innate such as more capital investment. Everything is a cost in an environmental project. Another topic is the interaction of our projects with labor issues against the current resurgence of unions.

A further issue is how do you deal with pressures for job growth and productivity improvement simultaneously? There's no industry that's achieved above average in value-added and in job growth. Watch out because you aren't going to get both. We may be in for a collision with the interest in labor, prompted by the supply chain optimization development initiative. We need to head that off with some research. But our evaluation system doesn't collect wage data.

Third, social service agencies have had a paradigm shift. It is used to be that people had problems and they'd come to you for solutions to the pathology. Now they are saying that maybe the approach is wrong and they are changing from focus on pathology to focus on strengths. They are moving from a needs-based paradigm to an assets-based paradigm. Now they are trying to capture people's resources, not just their problems. Social services agencies have in place indicators of what it takes to have a healthy lifestyle (e.g., a child should have a quiet place to do homework, an adult to call outside the home). If you have more of these indicators, then you are doing better. That brings the issue of the MEP. Do we know what the elements of a high performance manufacturer are? The evaluation system could be a system to measure how centers help manufacturers to have the good manufacturing life.

**Arnold.** This resource-based approach has been used in the national

---

innovation system. They are beginning to predict what resources are necessary to have such a system. One irritated sense I have is that the Monroe Doctrine rules here, as if there weren't others trying to do the same thing as the MEP is. Go steal ideas from these other programs. One idea has to do with leverage, because one-on-one assistance has a little impact on the largest economy. For example, this program could go and look at what large companies are doing, and steal those ideas for SMEs. Another old idea is that a piece of equipment used by large manufacturers could be brought to small manufacturers. The federal state may want to invest in these things. Some European programs, such as in Norway, have best practices networks. The notion is that there are ideas and practices and tools that can be stolen.

**Wilkins.** The issue of regional impact will become more important for us as we go forward. This involves the REMI model. I'd like to achieve at the public level some measure of the magnitude of impact we're having on the manufacturing economy. The issue of fast track firms is a second concern. Are we here just to serve the fast track companies or all companies? That's goes to the fundamental purpose of the program. We need to address this question before we talk about targeting high performance firms. Third, the state partner may in fact become a more important partner given the funding situation. But NIST through its evaluation strength has the opportunity to get together with the states. In larger states it may not be important, but in small states where we have to fight for every dollar, a visit from NIST will have a big impact.

**Blackerby.** I hear people talking about the characteristics of effective manufacturers. These should be identified

and then services could be geared more precisely toward advancing those firms. I think that's a good idea, but I'm wondering if that's an appropriate role of the evaluator. Maybe that's more of a role of program design before the fact, because evaluation examines results rather after the fact.

**Thompson.** I agree.

**Martin.** From a center perspective, you don't just look at what types of firms to serve to get the most impact, rather you look at what types of services to provide to get the greatest impact. It implies a conceptual matrix consisting of the customer base and the service provision base. That's not to say that any analysis of the customer base is worthless, it is very worthwhile.

**Haines.** I'm talking about the 160 case studies of firms. We have data in the system where we can do reality checks.

**Shapira.** Looking back at what we've accomplished and where we're going, I get worried when there's too much agreement so I appreciate what Michael Scriven has said. Evaluation should not just serve strategy but it should challenge strategy. In some ways it will suggest incremental improvements and in some ways dramatic changes. I would ask, how effectively is the evaluation community doing that? The size of the evaluation community has not grown commensurate with the growth of the program. How can we bring more people and perspectives in?

**Russell.** I haven't encountered any objection to the idea that MEP should kick in and grow. But a few years ago there was pressure to grow. Now the expectation is that we need to maintain what we have. Now competitor programs are emerging, so the quality of the

---

evaluation is an issue. I'm eager to arm us with this type of information.

Second, our discussions haven't sustained self-criticism. I think the purpose of the program is clear--to build commonwealth on a regional basis, and particularly to improve productivity. Our national survey doesn't focus on productivity yet. I eagerly await the details behind the NIST MEP plans about high performance centers and high performance firms.

**Oldsman.** A lot of ideas have been thrown out about what we need to do and what we don't need to do. I find it useful to frame a set of questions we'd like to answer. We only have a certain set of resources to answer, so I'd like to be really hard-headed about framing questions that are researchable, then think about the sources of information we can use to address these questions. Next year we can come back and say, "here are my answers to these questions." Right now we are data mining. That's ok sometimes. But I also think we need to focus on a few questions based on our judgements about where we think we need to make improvements to the program, and use not just surveys, not just case studies, etc. to answer these questions.

**Haines.** I see issues coming out of this meeting that fall into three areas: policy, center performance, and strategic planning. I believe what we'll see at the policy level is a call to lay out the questions we want to answer. To revise our evaluation strategy-- we'll be moving more toward the mixed methods approach and hopefully we'll be able to generalize to avoid asking the same questions of every project to continuously get answers. At the local level, we will try to make it simple. We'll try to answer questions with a specific study to simplify what local

centers have to provide. I do hear what you are saying about the state stakeholder. As it impacts the strategic plan, all stakeholders will be called on to give insights. We all have to design studies that will collect information to better inform the plan. For example, regarding Jack Russell's assertion that productivity is the aim of the program, we need to have better ways to inform that opinion. I appreciate everybody being here. I appreciate Philip Shapira's call for new faces at the table. We haven't expanded the community in the way that we have expanded the infrastructure. I make a commitment that in March I'll report out on the things that will change.