

Educational Research on Program Effectiveness
Dr. Eric J. Smith

I appreciate the opportunity to address this committee about a topic I find to be extraordinarily important to our nation's academic progress; research on the tools and strategies that we give our teachers to use in the classroom. I am speaking to you not as a researcher but as a consumer of research on educational strategies, tools and practices. In my career I have had the honor of serving 7 years as a classroom teacher, 8 years as a high school administrator, 17 years as a superintendent and 4 years as a state commissioner of education. Throughout my career, in each of these positions, I have been constantly searching for tools, strategies and practices that had some independent evidence that if properly used would result in positive outcomes for children. Said another way, I have always been searching for those tools and techniques that are unique, that can be used in a single classroom or used on a large scale and will generally result in positive achievement gains for children. To be blunt it has been a frustrating search. There are numerous approaches to choose from and as a consumer you will always be told that educational practices and tools are aligned to your standards, are research based and you will always be shown data that is intended to demonstrate that an instructional approach is extremely successful in raising achievement levels. Unfortunately there is still far too little independent research or information on the impact of various approaches to student learning.

My interest is in trying to find better information on the effectiveness of educational tools and approaches to help teachers, administrators and governing bodies to make more informed strategic decisions on how to improve student achievement. The question of effectiveness and impact is central to discussions of accountability, and should be part of the foundation in the development of reform strategies. School reform and accountability have as a premise that leadership can shape and control for academic outcomes by thoughtful strategic planning and execution. There is also an implicit assumption that the needs of individual children can be addressed through the careful planning of practices and strategies as well. Common variables include conditions of time, resources and quality instruction using high quality materials. The primary classroom materials chosen and given to the teacher to deliver the level of instruction required is an essential component. An example of connecting instructional strategy to the needs of individual students is found in the emerging development of adaptive testing. Adaptive testing is showing great promise in helping educators to be much more student centric in the delivery of instruction and in meeting the individual needs of students. Reform strategies such as these should be built around the type of work that is to be done in the classroom. Such strategies should be framed by the selection of classroom practices and selection of primary and supporting classroom materials. Those that make the decisions about classroom instructional practices and materials should be held accountable for their decisions. I have been in classrooms where a school or district has selected an instructional strategy with supportive tools and you will see teachers who have so little confidence in the approach, that they secretly have hoards of other materials to do the job. The quality of instructional tools and approaches matters to teachers and matters to

students. Some help, some don't offer much and it can be assumed that some may do harm.

So my interest in the question of what classroom practices and tools are effective resulted in me being selected to chair the Title 1 Independent Review Panel. It was an extraordinary experience. My colleagues on the panel were both brilliant and passionate about the issue of instructional improvement. I credit the work of Russ Whitehurst and others for pioneering a new way to look at the process of educational research. It was bold and aggressive and had the intent to base findings on a scientifically rigorous research methodology. As superintendent in Charlotte, our children benefited from much of these early efforts to redefine the research. In Charlotte we had no district wide strategy for reading instruction. You could go into an elementary school and reading would be taught differently at the opposite ends of a hallway. Strategically we needed to go to a district adoption so all teachers could be supported through professional development and adequate materials. But the question was: what approach would be most helpful for students? National research helped us make that decision and it was the right decision, reading achievement went up dramatically. Down the road in Florida, at about the same time, the entire state was making decisions about reading. Those decisions were also being informed by quality research and the results over the last decade have also been extraordinary.

But often a strict application of scientific research has significant challenges; the selection of the control group can be difficult if you are fairly certain that the intervention will be beneficial. There is also difficulty in maintaining the fidelity of the experimental group in a real situation and the process is slow and expensive. The instructional strategies will ultimately be used in states, schools and districts that don't have strict and rigid structures, kids come and go in classrooms as do teachers, schedules get interrupted, materials sometimes are in short supply and professional development can be delivered with varying quality. As a result, the nature of the research often fails to mirror reality. The research methodology has the tendency to be cumbersome in its implementation and lead to findings that are rigid and artificial. As a result, the research has limited relevance to the real conditions found in schools and classrooms.

Research that is available is also proving difficult to disseminate and get in to the hands of those who have the responsibility for making educational decisions. The regional labs are of widely different quality and unfortunately are not the "go to" place for information on meaningful research. Some of the labs do very good work but the quality and reputation varies, and as a result, they don't form a network of dissemination that provides national coverage. The What Works Clearinghouse is making good strides in dissemination, but is limited on bridging the research to application challenge, research findings are slow to become available and because of the nature of the research often lacks application in real situations.

My recommendations going forward are three fold; 1. continue to support independent research on the quality of educational strategies, tools, and practices, 2. develop new methods to gain insight into the effectiveness of educational strategies, tools, and

practices and 3. expand and create new channels for the dissemination of educational research.

My first point; the need for continued support for education research is critical because it is so central to all discussions of accountability and reform. I often say that schools don't fail, districts fail. The reason for that belief is that most of the important decisions relating to how a school operates are made at the district level; leadership, hours of instruction, calendar, staffing restraints and yes, selection of instructional tools and practices. The ability of a district to make sound strategic decisions about their selection of tools and practices is dependent on quality and timely information regarding the impact of the tools and practices. That should not be done district by district. States and the Federal Government have a responsibility to support independent research on the educational effectiveness of tools and practices. The research should be led in large part by practitioners, answering questions that are timely and relevant to their work with children.

Regarding my second point, in my testimony I have cited two examples where children benefited by making strategic decisions that were informed by quality research. I would also share that I have used other methods of gaining insight into the quality and effectiveness of educational practice that weren't based on rigorous scientific methods and proved to be very timely, cost effective and also resulted in significant benefit for students. I would give you one example. In Charlotte, one of my staff noted that the correlation between a student's PSAT scores and AP performance could be built into a program, and rosters of students that had good potential for success in AP could be generated. These simple correlation tables provided valuable insight into the use of the PSAT. The impact of knowing the correlation information and being able to apply it resulted in significant increases in college level high school work that was being offered to students and resulted in a significant increase in overall college readiness for the students in Charlotte. A second example is from my work as Commissioner in Florida. As Commissioner, I was able to develop plans that will expand our statewide data base to include the primary instructional practices and tools used in each classroom. The intent was that we could develop relational information between instructional practices and tools and student achievement in a variety of different school settings. These findings would be made available to districts for use in their strategic planning process.

Finally, there needs to be a stronger link between educational research and real world application. If there is a judgment about strictly designed research versus real world conditions of application, the call should favor the real world conditions in every instance. Information that is disseminated needs to be timely, addressing challenges the field has today not yesterday. It needs to address broadly defined challenges, the big questions, not narrowly defined questions that have little relevance. And dissemination needs to utilize existing organizations to communicate findings such as The Council of Great City Schools, CCSSO, Chiefs For Change, AASA and ASCD to name a few. If the research findings are not of interest to these organizations, they won't be of interest to their members either and dissemination will fail, fail because the research is not important.

This committee is addressing an issue of great national importance, important to our country and also important for our children. I commend you for your work.