

A Constructive Role for the Federal Government in Education

Paul Zachos & Robert Pruzek

What is the appropriate role of government in educational reform? The 25th anniversary of *A Nation at Risk*, the current controversies over reauthorizing No Child Left Behind (NCLB), and now the opportunities associated with a new presidential administration, all open the door to re-visiting this question. We propose that an appropriate role for government depends on an entirely different kind of information-gathering, and different ways of using that information to facilitate student learning. We propose focusing on what we call *practical learning goals* as a key means to that end.

Major 20th century educational-reform efforts foundered when innovations were evaluated using conventional tests. Innovators had failed to remember that an ironclad law drives educational programs: *The assessment used to evaluate an educational program shapes the curriculum as well as the instructional methods*. The standards-based reform movement, and the progenitors of NCLB in particular, did recognize the truth of that ‘law’, but the implementation methods of NCLB limited assessments to high-stakes norm-referenced tests (HSNR). The consequence was to undermine the potential for constructive application of that law.

HSNR tests are nearly always aimed at producing aggregate or composite scores; student performance is nearly always summed across sets of diverse item responses in such a way that details about student performance on individual items is masked or ignored. Specific item-response information that might be used to communicate effectively with individual students or to improve instruction is generally lost.

In short, HSNR test results tend not to be informative about details of learning or how to improve instruction. Moreover, items chosen for those wide-ranging tests rarely reflect the considered judgments of individual teachers as to what students should have learned. Because HSNR tests mostly concern granting or denying access to social privilege (their use focuses on passing or failing), they are fundamentally non-educational, both in nature and in use.

By their nature, HSNR tests tend to promote an unhealthy concern for comparison with others in the learning environment. Competition – among states, districts, and schools, as well as teachers and students – is emphasized at the cost of providing consistent and constructive feedback to teachers or students concerning specific instructional goals. When test scores and grades are used to manage students (as well as teachers and schools) the effect is to turn education into a commodity: students become (successful or failed) products with little concern for their individuality.

In order to create appropriate assessments – whose results are consistently used to serve individual students and focus teachers’ attention on specific curricular objectives – educational programs must have clear goals for learning that promote the development of desired human capabilities. The standards-based reform movement recognizes the central role of learning goals because their content standards are exactly that -- goals for valued

learning outcomes!

But goals alone are insufficient. Steps must be taken to ensure that goals are linked to realizations of specific student attainment. State-level standards are typically too broad and too far removed from the classroom to support effective teaching and assessment. To become practical, learning goals need to be defined at the level of the teacher-student interaction, with specificity appropriate to that venue. For example, a state standard might call for competence in proportional reasoning; a corresponding *practical learning goal* would target the ability to use ratios and proportions to determine whether a given object will float or sink in a given liquid. At this practical level, assessments can be constructed to show the extent to which the learning goal has been achieved.

The National Assessment of Educational Progress (NAEP) demonstrates a working model of the benefits of practical learning goals. NAEP summarizes results of assessments in many ways for a wide variety of well-defined learning goals. NAEP results refer explicitly to specific skills or knowledge. An educator at any level, and even a thoughtful member of the general public, can examine results of such assessments and have a sense of what has or has not been attained. Skilled teachers can examine NAEP goals and readily start thinking of ways to help their students develop the targeted capabilities.

Because those kinds of assessments are focused and specific, they have meaning at the level of student-teacher and student-class interactions, as well as at the level of school, district, state and nation. Assessments tied to practical learning goals offer the potential for meaningful descriptions of what students can do or know, which in turn can facilitate educational planning and explanations of how well curricular goals are being met. Based on a foundation of this kind educational accountability can be approached in ways that are supportive, instead of being overbearing.

NAEP suggests a natural role for the federal government in education. As a first step, panels of teachers, content specialists and educational researchers need support to identify learning goals for what might be called *core capabilities*. Core capabilities constitute crucial foundations for learning and for subsequent applications to real-world problem solving. The details about how to identify and assess student attainments of specific core capabilities can be fundamental parts of setting curricula, and supporting instruction. NAEP results can provide benchmarks for individual teachers or schools in standard-setting that can help parents and the public to evaluate how their schools are performing with respect to generally recognized core capabilities.

Schools need to ensure that local assessments avoid punitive or manipulative action by administrators or any other stakeholders. Working with practical learning goals, teachers can exercise professional discretion and freedom in designing and carrying out instruction for their students. When students are unable to demonstrate particular desired skills or understanding after the teacher has done his or her best, professional development or other local resources can be provided.

Practical learning goals can provide a new basis for education reform. Networks of teachers can build and exercise much needed professional skills related to assessment and evaluation. When teachers receive detailed and carefully summarized information on the extent to which their students are attaining learning goals for core capabilities, they can study the specifics of how their students perform. Such details are essential to take into account the methods of instruction and the characteristics of the individual students. Information pertaining to differences in student developmental levels, their prior knowledge, experience, or ethnic/cultural background can be given special attention. Individual teachers or schools that are particularly successful in helping students reach practical learning goals or core capabilities (perhaps especially for subgroups, such as disadvantaged students) may be invited to step forward and exercise leadership in professional development. Educational reform can begin to take effect at the level of the classroom where most education takes place.

Government can thereby play a number of productive roles in educational reform. These include facilitating activities in which core capabilities are identified, assessed and studied in relationship to educational programs. Government can also provide resources to support teachers, research institutions, and educational agencies that demonstrate educational needs and particularly those that present viable and innovative plans for meeting those needs.

• • •

Paul Zachos directs the Association for the Cooperative Advancement of Science and Education (ACASE), a professional association of teachers and scientists who develop innovative ways to support teaching and assessment.

Robert Pruzek is a professor of methodology and statistics at the State University of New York at Albany, with joint appointments in the departments of Educational and Counseling Psychology, as well as Epidemiology and Biostatistics.

**For further inquiry, please contact:
The Association for the Cooperative Advancement
of Science and Education (ACASE)
110 Spring Street
Saratoga Springs, NY 12866
www.acase.org
518/583.4645
518/587.6467 (fax)**