

---

## Forming American Educational Policy with International Data: Lessons from the Sociology of Education

**John W. Meyer**  
Stanford University

**David P. Baker**  
The Catholic University of America and  
American Institutes for Research

*The sociology of education offers three relevant lessons from its past to improve the use of international data on education by American policymakers. The first is that school-improvement research should be extended to include more routinely the wider organizational variation in schools cross-nationally. The second is that there are hidden organizational trade-offs in educational reform that are aimed solely at mechanically improving the achievement of students. The third is that the type of data that may be the most useful to policymakers is not being adequately collected. These three points are discussed in relation to recent U.S. and international studies and statistics on education.*

---

**O**ne surprising legacy of the Reagan-Bush era has been the “internationalization” of American educational policy and policy analysis. Domestic advocates in the educational establishment now regularly argue their cases on international grounds. These debates are fueled by the availability of cross-national data on achievement and have, in turn, generated a demand for more and better comparative data. Consistent with its historical mandate, the U.S. Department of Education—specifically the Office of Education Research and Improvement, through its National Center for Education Statistics—has responded to this situation by considering ways to expand the supply of international data for educational policy making.

The current interest in international comparisons, stemming from both the federal government and the American educational establishment in general, demands data of far greater technical quality, the more widespread use of international data in domestic policy decisions, and the more routine incorporation of such data into the legislative

process. These demands have increased the stakes for the U.S. Department of Education in the area of international data; a successful effort now will have important consequences for some time to come (for descriptions of the federal government’s recent role in collecting and compiling international education statistics, see Baker 1994; Griffith, Owen, and Baker 1994).

As a research field, the sociology of education can offer some important advice on how international data could play a greater part in the formation of American educational policy. It can offer lessons on at least three relevant issues: (1) extending school-effects research to incorporate comparative data, (2) considering the trade-offs involved in reform efforts to increase national achievement levels, and (3) broadening the range of international data to be collected and used.

### RESEARCH ON SCHOOL EFFECTS

Over the past 30 years, a major contribution of sociology of education to policy has been the large research litera-

ture on school effects. Going beyond a narrow concept of school organization, research on school effects has come to mean the wide search for effective learning environments in actual schools. Using sociological methods, theories, and techniques, sociologists have dominated this field. *Equality of Education Opportunity* (Coleman et al. 1966) and other major studies, plus the accrued effects of numerous specific and technical studies of school effects, all done within a sociological vein, have enabled policy-makers to think about schooling as occurring in malleable organizations, to rely on technical assessments of schooling, and to see schooling as an efficacious societal institution. These are major, salient consequences.

But at the same time, a reasonable summary of the main conclusions of three decades of this research may be that we know more about what *does not* matter for achievement than what does. Beyond "family background," in a multitude of forms and nuances, studies of school effects, particularly those conducted in the United States, cannot easily point to a set of organizational principles to improve schools. This statement is not as gloomy as it first sounds, given that we have clearly established the outer limits of organizational effects and have a detailed understanding of the effects of family background on educational attainment. Rather, it may be useful to think of research on school effects as being at a crossroads. One direction leads back over covered ground with only minor improvements of established findings. The other direction leads to work with greater and more multidimensional organizational variations. The latter route will inevitably rely heavily on international comparisons of various organizational arrangements in a fashion that usually cannot be done in domestic studies. In short, school-effects research has much to gain from a full program of international educational statistics.

The lesson, then, is that international comparative research and data are natural allies of sociological research on school effects. Comparative data on organizations and achievement can expand this central field of policy research

and thus broaden the grounds on which American educational policy is debated. This is a clear justification for the federal government's continued interest in providing international data. This lesson, is of course, two-sided. Although the American sociology of education almost single-handedly invented the field of school effects, it has not in the past effectively incorporated international work into its own literature (Ramirez and Meyer 1981). For example, although early evidence that was counter to the main American findings from British research (see, for example, Rutter, Maugham, Mortimore, Ouston, and Smith 1979) was included in the debate, more striking findings from cross-national work, such as those by Heyneman and Loxley (1983), have had less of an impact (see Baker 1994 for a discussion of this phenomenon). The increased internationalization of educational data and policy may help both policymakers and researchers see their common interest in international studies.

#### ACHIEVEMENT POLICY AND TRADE-OFFS

Most of the recent policy debates that have used international information have been on the achievement of students and, consequently, so have recent American reform efforts (Murphy 1990). In part, this focus is a function of what is available to debate, but it is also a function of what is new and titillating to the public.

Starting in the 1950s, researchers from the International Education Association (IEA), working in loosely organized consortia, have conducted a number of cross-national studies of achievement, usually with only sporadic and weak funding, at best. Nevertheless, these studies have been effective and important and, along with several other types of studies (such as the International Assessment of Educational Progress 1991), are the main source of international data on achievement. The dimensions considered in the IEA studies have increased over time, with more countries participating and more complex data being collected.

Wishing to avoid the appearance of encouraging crass nationalism, early IEA studies tended to avoid reporting summary national statistics and hence received relatively little attention from the public (or from policymakers). Ironically, as studies increasingly reported summary data, the crass international horse races have attracted the attention of the mass media, which has, in turn, brought the IEA substantial multilateral governmental funding and public attention. With the rising cost of conducting cross-national, rigorously technical studies, IEA will need this support if it is to survive into the next century.

In relation to the debate on American educational policy, the usual scenario for recent IEA studies has been as follows. First, when the results appear, it is pointed out in the media and in research journals that the scores of American students are not especially high compared to the scores of students in other key developed countries (in general, the achievement scores in developing countries are quite low). Often the low U.S. scores are characterized in the media as lower than they actually may be (Medrich and Griffith 1992). And when the results are presented along with accounts of the long history of the expansion of American mass education and the country's economic and political hegemony in the world in the past 50 years, they create a public stir.

Second, much attention is focused on countries whose students do well, particularly those, such as Japan and Korea, that are considered economic competitors of the United States. This attention is followed by some debate over the meaning of the scores and the causes of the subpar performance of American students. As was the case with the studies of mathematics and science achievement in the mid-1980s, this debate is often unwieldy in its focus and, at times, acrimonious because of what is at stake (see, for example, Baker 1993; Bracey 1991; Lerner 1982; Medrich and Griffith 1992; Ralph, Keller, and Crouse 1994; Rotberg 1990; Westbury 1992, Wolf 1977).

It should be noted that this scenario better describes reactions to tests on

which American students do less well than do students in other countries than to those on which they do better. For example, consider the relatively higher performance of American students on the recent IEA Reading and Literacy study (IEA 1992), which has not caused the reaction that the lower performance of American students in mathematics and science studies did several years ago.

The final step in the scenario is the heightened readiness by the American educational establishment for reforms oriented toward improving achievement. Governments and the general public—especially in the United States—imagine that youthful achievement translates fairly directly into the individual and then aggregate productivity of adults (Meyer 1977). Thus, evidence of low U.S. productivity (in comparison, say, to Japanese or Korean productivity) often leads to a national educational crisis with a demand for reform (see Meyer 1986).

The problem is to decide what exactly should be reformed, on the basis of these international comparisons, and what systemic effects any reforms will produce. For example, in regard to the low scores of American students on mathematics and science tests, several potential malleable sources of improvement have been identified—such as controlling, homogenizing, and enriching curricula (see McKnight et al. 1987; Stevenson and Baker 1991) or improving classroom instruction—even though these sources most likely do not account for the majority of the cross-national variation. Nevertheless, ideas such as these have produced reform efforts in the United States that have been devoted to strengthening and homogenizing curricula and instruction through a variety of mechanisms: state or national tests and standards of accountability for both students and teachers, the upgrading of state and national curricula, improvements in the training and selection of teachers, expanded requirements for graduation, and so on. More indirect efforts, including tightening discipline to focus schools and classrooms on academic achievement, are also common.

For example, much of the need for reform is put forward as if the current American situation is the result of sloth and ineptitude (or, more precisely, suboptimization of effort by students, teachers, administrators, and parents). This view may understate the extent to which the American educational system—with all of what are now considered its great defects—has its own substantial roots in the country's educational and political history.

Although these policies may increase national achievement, we do not know at what cost. What national trade-offs would be produced by achievement-related reforms? The sociology of education has generated a large literature on the institutional structure of modern schooling, in general (see Meyer 1977), and on the American case, in particular (see Rubinson 1986). This literature argues effectively that schools are more than technical organizations of achievement; they provide formal and informal socialization and have other effects on society.

This system has operated as an institution for at least 150 years, with an ideology and structure that emphasize the maximization of voluntary participation and commitment. Students are generally supposed to feel good about their schooling and accomplishment, and a wide range of students' interests may properly enter into school choices and assessments. To a much greater extent than in most other countries, American teachers and administrators are supposed to adapt not only to their own visions of education, but to those of the communities in which they work. Communities and their school districts are similarly legally and ideologically highly empowered. So are, constitutionally, the states. A wide range of interests at all these levels forms an institution in which involvement in activities (participation, including widespread enrollment) and commitment (self-esteem and educational aspirations and intentions) are valued.

The American educational system seems to have been designed, over a long period, to try to maximize such qualities—not simply achievement levels.

Therefore, achievement is actually intertwined with this institutional structure. Academic success in American schools is related to the ability and motivation of students, parents, and educators to have high levels of participation. The effect of this structure on achievement is perhaps most clearly seen in the wide variation in learning that takes place in American classrooms relative to those of other countries. There are many engaged and successful American classrooms, but there are also many more subpar classrooms than in other developed countries (see Baker 1993 for an analysis of this situation with regard to mathematics).

Indeed, this variation in participation (and access) is a constant topic of concern within the educational establishment. The most recent manifestation of this concern has been the broadening of schools to incorporate minority students, female students, and students with various handicaps more completely; the aim is for all these students to be and to feel like more complete participants (and, hence, to experience success).

As far as one can see, the American educational system has historically produced these effects more than have educational systems in most other developed countries. American students choose a wider range of their work and have chosen to be involved in schools for longer periods into adult life, and they evidence surprisingly high academic self-concepts and educational (and occupational) aspirations far later in life than do those in most other developed countries. Furthermore, teachers report that they have a great deal of discretion (autonomy) over curricula and standards and surprisingly high levels of job involvement and satisfaction. And people in American communities seem to report a good deal of satisfaction with and involvement in their own schools (though not with the educational system in general).

Reforms aimed at tight and centralized national curricular structures, based on legislated national standards, would undercut some of the optimism that seems intrinsic in the American educational structure and ideology. In other words,

the institutional trade-offs could be formidable. For example, we do not know what other valued outcomes might need to be sacrificed to increase levels of achievement, and we often do not even have measures (let alone cross-national ones) of such other valued outcomes. Obviously, informed policy choices would require a broader range of cross-national information—covering a wider range of outcomes—than is available.

But beyond a certain point, basic descriptive cross-national data are not good enough. The investigation of some of the trade-offs imagined in both American ideology and social science analyses would require the use of elaborate research designs and analytic structures. Consider, for instance, the common American educational practice of concealing students' relative failure to achieve (for example, in routine promotions, open-enrollment policies that permit very weak students to go on to higher education, low curricular standards, and relatively low grading standards). Such approaches tend to be justified in terms of their immediate effects on attitudes—that is, they maintain students' interest, involvement, and self-esteem—although they probably have immediate costs in terms of the achievement of particular students and of these students' peers (the lowered standards decrease the pressure on peers to achieve, too). But according to American thinking, the lowered standards, with presumably enhanced attitudes toward education, are justified in the long run. Students who have been so encouraged will be more likely to have attitudes that enhance learning in the long run; that is, these students will have better self-concepts as educated persons and may continue to have a favorable view of learning long after they have left school.

Assessing an educational policy that is designed to make almost no one have a "dropout self-concept" and to make school leavers have favorable views of learning even decades after they leave school requires elaborate longitudinal research—in this case, studying the putatively enhanced learning of dropouts a decade or two later.

Although international data have cre-

ated an unusually high motivation for reform, they have little to say about these other institutional factors. The problem for policy research is that good comparative data tend not to be available on many of the outcomes at issue here, so it is not clear how much could be lost by establishing a national policy that is driven primarily by the need for the immediate improvement of achievement. Cross-national data are weak on the choices and autonomy of students and teachers, on actual and psychological involvement, and even on long-term participation in education-related activities long after people have been involved in mass education. The sociological literature on the institutional structure of the American system would strongly recommend that the federal government should be sensitive to these issues in its future international comparisons.

#### EXPANDING THE SEARCH FOR OUTCOMES

Throughout American educational history, international comparisons have been used in policy discussions. Educational arrangements in other countries—competitors, such as turn-of-the century Germany, the Soviet Union in the 1960s, and present-day Japan, and other types of models, including that of Maoist China—have constantly been cited. Making such comparisons was one of the original (and ongoing) functions of the 19th-century federal Bureau of Education. Comparisons involved matters of funding, organization, expansion of enrollment, curricula, teaching methods, and equity across social groups defined in terms of class, race, or gender. As we have described, the current reemphasis on systematic comparative data has made it possible to make such comparisons with data on educational achievement. Certainly, technical improvements in international data on achievement will continue, but for the reasons mentioned earlier, such data should not become the sole source of information on international education for American policymakers.

Historically, the most commonly used

educational data have concerned enrollment. The international data system—particularly through the efforts of UNESCO—built up standardized record-keeping systems in this area over a number of decades. Since the United States was historically a leader in enrollment, comparisons of enrollment were used infrequently in American policy advocacy because the effect on other countries was much greater.

Beyond basic statistics on achievement and enrollment, the quantity and quality of data decline sharply.<sup>1</sup> Cross-national information on curricular details (or even outlines) are scarce, and the quality of data is not strong (see Meyer, Kamens, and Benavot 1992 for examples). Thus, we know surprisingly little even about the substance of intended curricula around the world—let alone about the curricula that are implemented in some sense in the classroom. It seems clear that better data on such matters would inform policy choices (although probably not direct them, given the uncertain goals in such areas). The situation is the same regarding the available cross-national data on testing; there are a good many case studies and a few comparisons of a small number of countries, but nothing in the way of systematic comparisons.

At the level of the actual classroom, international data on curricula, teaching methods, forms of student involvement, and so on are weaker. Some of the IEA studies have incorporated curricular variables, but these variables have not often become part of international analyses to the degree that they warrant. Isolated case studies make up the comparative data set, here. The same thing is true of organizational matters—the distribution of roles, authority, and personnel across levels and sectors of the school and the educational system beyond the school. Particular countries are considered to be more centralized or less centralized, for instance, but the data on which this supposition is based are often primitive. These matters take on some importance when one realizes that a great many policy proposals in the United States concern exactly the issues discussed here: changed forms of testing, of curricular content, or of the organiza-

tional structure of schools or the educational system. Much more systematic information on other countries and the consequences of their curricular and organizational forms is needed before this country can consider adopting parallel structures.

Even though the use of international comparisons of education has been a hot topic in Washington recently, there is cause for concern over how far this interest will actually go. The current world economic crisis has probably weakened the international data-gathering systems overall, especially among developing countries. Some of the same effects have undercut comparative educational data systems in the central world organizational agencies (such as UNESCO) as well.

The federal government needs to choose wisely in its efforts to supply more international data for the American educational policy process. A reliance on “high-tech” data on achievement and cruder organizational and institutional indicators may not yield many new insights for policy making. A more balanced program of data, with perhaps a more even spread between data on achievement and other aspects of education, is needed.<sup>2</sup>

## NOTES

1. The OECD indicators project (Organization for Economic Co-operation and Development 1993) has attempted to fill some of this gap. Although it is a useful source of data, it is still a long way from an analytic tool for policy analysis.

2. The fact that some of the innovative design of the IEA Third International Mathematics and Science Study, currently in progress, attempts to link data on achievement with more sophisticated institutional measures is partly a consequence of the major role the U.S. government played in planning the study. The degree to which the study is successful will determine the future of this cross-national approach.

## REFERENCES

Baker, David P. 1993. “Compared to Japan, the U.S. Is a Low Achiever . . . Really: New

- Evidence and Comment on Westbury." *Educational Researcher* 22:18–26.
- \_\_\_\_\_. 1994. "In Comparative Isolation: Why Comparative Research Has So Little Influence on American Sociology of Education." Pp. 53–70 in *Research in Sociology of Education and Socialization* (Vol. 10), edited by Aaron M. Pallas. Greenwich CT: JAI Press.
- Bracey, Gerald. 1991. "Why Can't They Be Like We Were?" *Phi Delta Kappan* 72:106–121.
- Coleman, James S., Ernest Q. Campbell, Carol F. Hobson, James M. McPartland, Alexander M. Mood, Frederic D. Weinfeld, and Robert L. York. 1966. *Equality of Educational Opportunity*. Washington, DC: U.S. Government Printing Office.
- Griffith, Jeannie, Eugene Owen, and David P. Baker. 1994. "Strategic Plan for International Activities at the National Center for Educational Statistics" (White Paper). Washington, DC: National Center for Educational Statistics. (Available from the authors on request.)
- Heyneman, Stephen P. and William A. Loxley. 1983. "The Effects of Primary-school Quality on Academic Achievement across Twenty-nine High-and Low-Income Countries." *American Journal of Sociology* 88: 1162–94.
- International Assessment of Educational Progress. 1991. *The 1991 IAEP Assessment*. Princeton, NJ: Educational Testing Service.
- International Association for the Evaluation of Educational Achievement (IEA). 1992. *How in the World Do Students Read?* The Hague, the Netherlands: Grindeldruck.
- Lerner, Barbara. 1982, April. "American Education: How Are We Doing?" *The Public Interest*:59–82.
- McKnight, Curtis, F. Joe Crosswhite, John Dossey, Edmund Kifer, Jare Swafford, Kenneth Travers, and Thomas Cooney. 1987. *The Underachieving Curriculum: Assessing U.S. School Mathematics from an International Perspective*. Champaign, IL: Stipes.
- Medrich, Elliot and Jeannie Griffith. 1992. *International Mathematics and Science Assessments: What Have We Learned?* Washington, DC: National Center for Educational Statistics, U.S. Department of Education.
- Meyer, John W. 1977. "The Effects of Education as an Institution." *American Journal of Sociology* 83:55–77.
- \_\_\_\_\_. 1986. "The Politics of Educational Crises in the United States." Pp. 44–58 in *Educational Policies in Crises*, edited by W. Cummings, E. Beauchamp, S. Ichikawa, U. Kobayashi, and M. Ushioji. New York: Praeger.
- Meyer, John W., David H. Kamens, and Aaron Benavot. 1992. *School Knowledge for the Masses: World Models and National Primary Curricular Categories in the Twentieth Century*. London: Falmer Press.
- Murphy, John. 1990. *The Reform of American Public Education in the 1980's: Perspectives and Cases*. Berkeley, CA: McCutchan.
- Organization for Economic Co-operation and Development. 1993. *Education at a Glance*. Paris: Author.
- Ralph, John, Dana Keller, and James Crouse. 1994. "How Effective Are American Schools?" *Phi Delta Kappan* 76:2:144–50.
- Ramirez, Francisco O. and John W. Meyer. 1981. "Comparative Education: Synthesis and Agenda." Pp. 215–38 in *The State of Sociology: Problems and Prospects*, edited by J. Short. Beverly Hills, CA: Sage Publications.
- Rotberg, Iris. 1990. "I Never Promised You First Place." *Phi Delta Kappan* 71:296–303.
- Rubinson, Richard. 1986. "Class Formation, Politics and Institutions: Schooling in the United States." *American Journal of Sociology* 92:519–48.
- Rutter, Michael, Barbara Maugham, Peter Mortimore, Janet Ouston, and Alan Smith. 1979. *Fifteen Thousand Hours: Secondary Schools and Their Effects on Children*. Cambridge, MA: Harvard University Press.
- Stevenson, David Lee and David P. Baker. 1991. State Control of the Curriculum and Classroom Instruction. *Sociology of Education* 64:1–11.
- Westbury, Ian. 1992. "Comparing American and Japanese Achievement: Is the United States Really a Low Achiever?" *Educational Researcher* 21:18–24.
- Wolf, Richard. 1977. *Achievement in America*. New York: Teachers College Press.

**David P. Baker, Ph.D.**, is Associate Professor, Department of Sociology, The Catholic University of America, and a part-time Senior Research Scientist, American Institutes for Research, Washington, DC. He is a comparative sociologist of education, organizations, and labor markets. He is working on studies of the organization of American schools for the U.S. Department of Education and on school achievement and organizations cross-nationally. His most recent work is a study of the expansion and organizational transformation of American higher education from 1900 to 1990.

**John W. Meyer, Ph.D.**, is Professor, Department of Sociology, Stanford University, Stanford, California. His main fields of interest are the sociology of education, comparative sociology, political sociology, and organizations. His current work is on the rise of science in world society and its impact on national states and societies.

*The comments offered in this article are solely those of the authors, but they benefited from a roundtable discussion at the Office of Research Conference, Washington, DC, June 29, 1992. The participants included Rolf Blank, Robert Dreeben, Eleanore Dougherty, Elaine El-Khawas, Steven Heyneman, Richard Ingersoll, Edith King, Francisco Ramirez, and Larry Suter. At the time of writing, David P. Baker was the AERA Senior Fellow at the National Center for Education Statistics, U.S. Department of Education, under a NCES grant and Grant RED-9255347 from the National Science Foundation. The opinions expressed in this article are the authors' and do not necessarily reflect those of the granting agencies. Address all correspondence to Dr. David P. Baker, Department of Sociology, The Catholic University of America, Washington, DC 20064, or by e-mail at baker@CUA.edu.*