
NATIONAL CENTER FOR EDUCATION STATISTICS

Working Paper Series

The Working Paper Series was created in order to preserve the information contained in these documents and to promote the sharing of valuable work experience and knowledge. However, these documents were prepared under different formats and did not undergo vigorous NCES publication review and editing prior to their inclusion in the series.

NATIONAL CENTER FOR EDUCATION STATISTICS

Working Paper Series

Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance

Working Paper No. 96-11

June 1996

Contact: Dan Kasprzyk
Surveys and Cooperative Systems Group
(202) 219-1588

U. S. Department of Education
Office of Educational Research and Improvement

U.S. Department of Education

Richard W. Riley

Secretary

Office of Educational Research and Improvement

Sharon P. Robinson

Assistant Secretary

National Center for Education Statistics

Jeanne E. Griffith

Acting Commissioner

Surveys and Cooperative Systems Group

Paul D. Planchon

Associate Commissioner

National Center for Education Statistics

The purpose of the Center is to collect and report "statistics and information showing the condition and progress of education in the United States and other nations in order to promote and accelerate the improvement of American education."—Section 402(b) of the National Education Statistics Act of 1994 (20 U.S.C. 9001).

June 1996

Foreword

Each year a large number of written documents are generated by NCES staff and individuals commissioned by NCES which provide preliminary analyses of survey results and address technical, methodological, and evaluation issues. Even though they are not formally published, these documents reflect a tremendous amount of unique expertise, knowledge, and experience.

The *Working Paper Series* was created in order to preserve the information contained in these documents and to promote the sharing of valuable work experience and knowledge. However, these documents were prepared under different formats and did not undergo vigorous NCES publication review and editing prior to their inclusion in the series. Consequently, we encourage users of the series to consult the individual authors for citations.

To receive information about submitting manuscripts or obtaining copies of the series, please contact Suellen Mauchamer at (202) 219-1828 or U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, 555 New Jersey Ave., N.W., Room 400, Washington, D.C. 20208-5652.

Susan Ahmed
Chief Mathematical Statistician
Statistical Standards and
Services Group

Samuel S. Peng
Director
Methodology, Training, and Customer
Service Program

**Towards an Organizational Database
on America's Schools:**

**A Proposal for the Future of SASS,
with comments on
School Reform, Governance, and Finance**

David P. Baker

June 1996

The Catholic University of America
and
American Institutes for Research

Table of Contents

Foreword	iii
Preface	vi
Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance	1
The New SASS as an Organizational Database on Schools	2
How Could a New Organizational SASS be Implemented?	10
How Different in Focus Would a New Organizational SASS be from the Current SASS?	14
Organizational Theory and the New SASS	15
Why a Database on Schools as Organizations?	18
A New SASS and Information about School Reform	21
References	24

Preface

As is evident from the title, I have taken some liberty with my assignment to prepare a statement on what the next Schools and Staffing Survey (SASS) should include in terms of school reform, governance and finances. Although I address each of these, I do so by proposing that the next SASS be made into an omnibus survey about the internal organization of K through 12th grade schools. The main focus of SASS should be on how schools manage faculty, students, curriculum and resources; how decisions are made about these; and what kinds of administrative controls are in place to implement decisions. The objective is to collect information that would provide NCES with a basic picture of how schools work as organizations. Then, if need be, supplemental information could be added to address specific trends in education as they occur. A re-design of SASS presents NCES with a major opportunity to capture school level information that will increasingly be of importance to its statistical program.

I propose reversing the original order of priorities of SASS to one of first, organizational and managerial information, then second, teacher and teaching information and lastly teacher supply and shortages. The past SASS's steadily collected more school organization and managerial information over the course of the last three surveys, so while this would be a renewed SASS, it would not be a radical shift for the SASS project. Additionally I recommend that much of the current SASS remain the same, but with some key modifications to crucial questionnaires. As instructed, I have not written actual new items, but I have tried to describe what new items should be constructed, where they should be placed in the survey and what their informational intent must be.

Also, as instructed, I have written this for the "insider" reader who is familiar with NCES and SASS. For those readers who are less inside, two publications make good companions to this document: the most recent **Programs and Plans of the National Center for Education Statistics** and **SASS and PSS Questionnaires, 1993-1994**.

Much of what is written here originates from an internal memorandum Tom Smith, Nabeel Alsalam and I prepared while I was an AERA Senior Fellow at NCES (Baker et al. 1994). Although I assume complete responsibility for any still half-baked ideas, I owe my two colleagues much for their help in thinking about an organizational survey of schools for NCES. I also would like to thank Joel Sherman, Tom Parish and Jay Chambers at AIR for their helpful comments about SASS and finance issues. And thanks to Maryellen Schaub for her comments on an early draft. And lastly thanks goes to John Mullens at PSA for his kindly monitoring of my progress during work on this document.

I have made a few changes in this draft after the January 25, 1996, presentation to NCES. I would like to thank Susan Fuhrman for her helpful comments. Also I would add that the approach recommended here is compatible with the "district approach" suggested later by Michael Ross.

The ideas and recommendations herein are those solely of the author acting as a private consultant to NCES and do not necessarily represent the positions of any organization with which the author is affiliated.

Towards an Organizational Database on America's Schools:

A Proposal for the Future of SASS, with Comments on School Reform, Governance, and Finance

David P. Baker

The question before us is what could, and should, NCES' Schools and Staffing Survey (SASS) become in the future? In other words, what role should subsequent collections of SASS play in NCES' statistical program? It is recommended here that, while some continuity between past and future surveys is important, SASS should not just repeat what it has done in the last three surveys.

After three data collections and almost of decade of service to NCES, SASS is at a cross-roads in its development. One road leads on in the same direction set by the three completed surveys, with perhaps only some minor additions and slight modifications to the items. Although I see nothing wrong with doing reports similar to past ones with fresh data, it is nevertheless a limited strategy that will not maximize the use of future SASS's. To essentially repeat what has already been done retards emerging developments SASS has made over the past three surveys. The other road follows these developments towards a new SASS that presents NCES with an opportunity to provide more complex and broader information on schools as educational organizations. I, therefore, recommend taking this other road, one that leads in a new direction.

The new direction is to make SASS NCES's main vehicle for organizational information about the nation's K through 12th grade schools. The focus of future SASS's should be broader than in the past by including a wider scope of information about how American schools are organized. It should become the baseline, fundamental survey for a host of NCES's efforts in describing elementary and secondary schooling in the country. SASS has moved in this direction and it should move further still

beyond a more narrow survey on teacher supply and demand to an omnibus survey of school organization.

I recommend a renewed SASS for four reasons that are explored in some detail below. The reasons involve: 1) what SASS has become over the past decade; 2) what I perceive as some critical weak points in NCES' statistical program on K through 12th grade schooling that need addressing; 3) what knowledge and technical capabilities about surveying schools have been accrued over the last three SASS's; and 4) what I think NCES should collect about how schools approach reform, their governance structures, and finances in the American system of formal education.

Before discussing the reasons for a new SASS, I will first describe what a broader organizational survey might look like. This description will move through the general to the more specific. Then I outline one example of how this might be done within the current length and scale of SASS. This is followed by discussions of a new SASS in comparison to the current one; SASS and organizational theory; and the reasons why a new SASS is useful at this point in NCES' history.

The New SASS as an Organizational Database on Schools

What would an organizational database consist of and how different would this new SASS be from the last three? What basic organizational components should be added to the existing organizational information collected in the 93-94 SASS? What essential information about a school should SASS collect for NCES? To answer these questions, I see at least four main perspectives that an organizational survey of schools must take to maximize its benefit for NCES.

I. One main focus of the survey must be on how a school organizes its main dynamic components

That is to say, information should be collected on how a school organizes its four main components of: 1) faculty; 2) student body; 3) curriculum/instruction; and 4) immediate outside

environment such as parent and community groups interested in education. By "dynamic" I mean more emphasis on how decisions and control move through the organization and less emphasis on static titles and fixed structures. It is better to spend limited questionnaire space on, for example, how a departmentalized system influences control over teachers than on information about the status of department heads such as part-time, full-time and so forth. The focus on each of the four components should be on how decisions are made, what decisions have recently been made and how they are reviewed and changed. The key information to capture is organizational process not just organizational structure. Examples of information needed about each component are as follows.

Teachers: SASS has certainly been a major source of information on K-12 grade teachers, and a lot of this should be kept in a new SASS. But, as I illustrate below, some of the teacher information will need to be scaled down to make more room for information on the other three central components of school organization. But still we need to know more about how teachers and their activities are controlled (or not) in schools, who does the controlling, and over what issues. We also need to know more about what things teachers have real decision making power over and whether or not it is used. Some of this kind of information was collected in all three SASS's, but more direct items need to be developed than the questions about general influence teachers (and others) might have on certain issues. The key here is to capture a picture of how much administrative control there is over teaching and the work conditions of teachers and how much decision-making power teachers have within the school. For example, are teachers and their teaching observed, inspected and assessed? By whom and with what purpose? What kinds of collegial control is there in the school versus more hierarchical control from non-teachers?

Students: As the recent NCES Fast Response Statistical Survey (FRSS) on curricular tracking and student assignment to courses shows, NCES's student-level data sets such as HS&B and NELS do not tell us many key things about how schools organize student (NCES 1994; Baker, Ralph and

Manlove forthcoming). SASS could play a very important role in collecting information about how schools manage their students. A short list of examples include information on:

- policies about student choice of courses at the middle and secondary school level
- student discipline policies
- ways in which the school organizes parental involvement in schooling
- decisions about programs for students and policies about access to these programs
- school policies and management philosophies towards student abilities
- pedagogical approaches to variation among students in motivation, intelligence and educational and occupational goals (i.e. tracking and ability grouping)

There are many such issues to choose from and not all can be included, but again the key here is to gain a picture of how a school makes decisions about students and programs for students. Each prior SASS has increasingly done some of this, but more explicit information on these kinds of things should become part of the new SASS.

Curriculum and Instruction: A school's curriculum is a central and complex component of its educational operation. Yet, one of the weakest points within NCES' overall statistical program is information on what gets taught and how it gets taught. Most of the information on what is taught in schools is inferred from individual student course taking records or from teacher teaching loads; little is known about national estimates of school organization of the curriculum through secondary school courses or coverage time in the elementary school. In the past, NCES has collected relatively little information on curriculum, however there have been improvements. The attention that the term "Opportunity to Learn" has brought to curricular aspects of schooling will probably increase the amount of information collected on curriculum and instruction in the future (Brewer and Stasz 1995). A new organizational SASS would be a perfect vehicle from which to gather basic OTL information

on curriculum and instruction at the school level. For example, from just one item on the fore mentioned FRSS on curriculum tracking, NCES received for the first time national estimates of how public schools organize their course structure, requirements and enrollments in 10th grade mathematics and english. This kind of information should be collected for other grades. Besides course structure, information should be collected about curriculum content, such as what is meant by an "algebra course" in the 8th grade for example. Some parallel information on how the curriculum is implemented by teachers would be equally useful. Also information on how local, state or national standards are translated into actual curriculum is important to collect, as well as information about grading policies and how decisions in these areas are made at the school level. Some information of this type exists in SASS, but it is oriented towards representing a teacher's teaching load, not the school's organization of its full curriculum. NCES should know the basic dimensions of the k-12 grade curriculum in the nation's schools and a new SASS is a good way to do this. Because of the complexity of curriculum, a new SASS should not attempt to do an in-depth collection on this area of schooling, but some basic information would go a long way towards improving NCES's reporting on curricular and instructional information.

Immediate Outside Environment: Schools are linked to the community they serve through a series of semi-formal organizations such as parent organizations, business councils and other community groups. Schools interact with these and have varying roles in their creation and influence on education in the local community. Although these kinds of organizations may not be as fundamental to the day-to-day operation of a school as teachers, students and curriculum, they do play a significant role in school organization. A new organizational SASS should learn more about how schools connect with these kinds of organizations.

Other Components: Certainly there are other parts to a school that makeup its total organizational picture. The most obvious one without its own section above is the school's administration. In part this is because the administration plays a role in organizing and managing

each of the four main components of the school, so it is included in this way. Additionally, other information about the structure and function of the administration would be essential to complete the organizational description of a school. There may be other organizational components that a new SASS could include, but I have tried to provide the essential minimum.

II. **A second main focus of the survey should be on how much of the school's organization is influenced by district, state and federal educational agencies**

One of the unique features of the American educational system is its local administration of schools. From the beginning of American formal education, communities organized and controlled their own schools. This arrangement carried over into the period during which an extensive public school system was constructed by local governments. The American public school then is a local entity. However, over the past century different levels of government have taken a larger role in the regulation and control of schooling. Local education agencies (LEA's) are influenced by other government agencies at the state and federal levels. Added to this is the variation across the country as to which different levels of government have control over which specific areas of schooling. There is also a sizable private school sector at both the elementary and secondary levels which, compared to private schooling in many other developed nations, is relatively un-regulated by government.

Taken together these features make the American school system local, varied across place, and multi-governed. And this has direct and important consequences. For example, it may be far more difficult to standardize education within the U.S. than elsewhere. This feature is often put forth as one reason why the width of the distribution of academic performance among American students is large compared to that found among students in other countries. Also it is not necessarily easy to determine what is occurring within schools in this kind of a system. Indeed one of the reasons for the why NCES gathers most of its information through surveys instead of central administrative records,

as is commonly done in more centralized education systems of other countries, is because the unique governance structure of American schooling.

The suspicion, at least, is that there could be large variation in schooling across the nation. Some assume this and hold it as a positive in the form of high potential for innovation in this kind of a system; hence, for example, the reform notion of further decentralization of a already relatively decentralized system. Others present this more negatively and suggest that parochialism and incompetence in school administration can often go unnoticed and unchanged in this kind of a system. Regardless of which view is more accurate, this unique governance structure is a fundamental feature of American schooling and NCES needs to provide as much information on this feature's impact on schooling nation-wide as is possible.

It is important, then, for a survey of school organization to be able to gain some information on the influence that a multi-governance structure has on schools and what they do on day-to-day basis. Currently SASS includes some questions about influence from the district in some broad areas, but as stated above, these are not very specific and do not help to really distinguish between different kinds of governance environments found around the country and across public and private sectors. The new SASS should include information about how much influence various levels of educational governance have on the way a school organizes the four main components described above.

Although this is a complicated area, NCES should at least know some of the basic levels of influence that district, state, federal agencies have on schools. And this needs to be more specific than the general impression of the principal in terms of global influence, as is now asked in SASS. For example, which kinds of schools are bound by district rules and procedures for the hiring of teachers, assessments of instruction, creation of student programs, curricular issues and so forth? How much state control and regulation reaches the school in these areas? How much federal regulation reaches the school and what form does it take?

III. **SASS must gather more information on financial resources and their flows to the point of instruction**

Resources available to schools, broadly defined, will increasingly be a topic of policy debate as funds for education meet with stiffer competition for other activities. Although a new SASS can not and should not replicate the detailed school finance work already being done by NCES, it should include enough information on costs and resources to make some estimates of how school manage resources. The current information on teacher salary schedules is important to retain since it helps to generate cost estimates.¹

Since for the public sector at least, most finance and its controls are set beyond the school, both NCES' F33 at the local district and LEA level and the NPEF survey at the state level capture basic national financial information. What is missing is how much financial resources are transmitted into school level resources and how this is done. How much of the overall resources flow to the point of instruction? Besides teacher salaries and quality, one additional way SASS could add organizational information on this is to examine what instructional resources teachers have access to within sampled schools. For example, in more affluent districts teachers can be assisted by an array of other instruction personnel, such as curriculum specialist, resource teachers and other classroom level specialists, which adds to the total instructional resources reaching the students. Optimally NCES should know what portion of students and teachers have access to these and make use of them. Additionally it would be useful to know the degree to which resources are devoted to developing curriculum and instruction in the school and to parent and community organizations connected to the school. Even information on very basic instructional resources, such as supplies and simple technologies, could be useful information about overall resources and school organization.

¹ SASS could prove a vehicle to fill the gap on private school finance, although this is a separate issue from what is recommended here (see Garrett, 1996).

IV. **A new SASS must include measures of school-level educational outcomes**

The utility of what is proposed here for a new organizational SASS would be greatly compromised if it did not somehow include information on educational outcomes. Even though the details of this are explored elsewhere in this planning process, I wanted to make my separate recommendation known. For numerous reasons, NCES needs to incorporate into SASS school-level information on student achievement, promotion, dropout, disciplinary actions, college application and so forth. Currently SASS does a small amount of this in characterizing a school's student body, but more should be done in the next SASS. The central issue that reoccurs within the American educational policy arena is what outcomes are associated with what organizational features. From macro "school effects" research to work on the micro improvement of instruction, the assumption is made that schools and outcomes of students are linked. Some take a more explicit organizational view of this assumption, others are more skeptical, but nevertheless this idea is the backbone of most education policy. So for NCES to maximize its impact on the public discourse on education, it should maximize its ability to provide information related to this most basic of policy assumptions. Certainly both the NAEP and HS&B/NELS surveys yield important outcome information for NCES, but neither has the perspective that a new SASS could provide. NAEP was not originally designed to examine any inputs to achievement beyond technical controls for assessment estimates. And the HS&B/NELS surveys contain some school organizational data and student outcomes, neither is as extensive as what is proposed here. Also the main focus of these longitudinal surveys on the student's progression through school and into the labor market lends the data to answering more questions about what influences individual achievement and attainment than what types of school organization yield what types of outcomes for their students.

This is perhaps a fine distinction, but one that I think is worth considering. We actually do not know much about how various differences in school organization influence student outcomes in the aggregate. This was, for example, the original intent of the first Coleman report (1966), but the

study used what would now be considered a very simplistic notion of school resources and almost completely ignored the organizational dimension of schools. Thus when family and student background effects were found to "swamp" most school level effects, this line of research went in another direction. With an omnibus, organizational SASS that include educational outcomes, NCES would make a major contribution to the debate about what kinds of schools produce what kinds of outcomes and perhaps add insight on how this comes about.

I am not necessarily arguing for a full assessment of students in each surveyed school in SASS. Perhaps some sub-sampling could be done; or some form of linking with NAEP; or even some use of extant student assessments within school could be made. But the point is that for SASS to become a central vehicle for NCES, along with NAEP and NELS, it must include information on school outcomes.

How Could a New Organizational SASS be Implemented?

What is proposed below is just one example, a sketch really, of what might be done to incorporate the ideas above to make SASS an omnibus, organizational survey of K through 12th grade schools. In doing this I make several assumptions.

First, I assume that the next round of SASS will have to be designed within roughly the same length and response burden parameters as was in the 1993-94 survey. This makes planning additions and changes more or less a zero sum operation. For something to be added, something of equal size needs to be deleted. It also makes the job of designing a new approach of SASS difficult. This is particularly so for me since I find many of the current SASS items useful and I do not easily part with them.

Second I assume that the school will be the main unit of focus of a new organizational SASS. Information from supra-units such as districts and other LEA's (private or public) would be mostly focused on the sampled school. The same would be true for teachers in that the focus would be on

their experience with this school, as is currently the case with some parts of the teacher questionnaire. The logic here is the same as in HS&B or NELS with one primary unit of analysis with supporting information from others, but unlike these student level surveys, the focus of a new SASS is explicitly on the school.²

Third, I assume that most of the basic questions about schools such as enrollments, location, school types and so forth (i.e. many of things collected in section A of the School Questionnaire) would remain. Although the SASS staff might want to consider more efficient and less burdensome ways to generate this from principals. For example, would it be more efficient if principals were given a listing of their school's basic information from CCD that were used to create the sample and be asked to verify the accuracy of these?

Fourth, let us assume that approximately four to five items per revised questionnaire about each of the four components described above would provide enough information to draw an effective picture of the organization of the school.

Fifth, I assume that what is proposed here can be adapted for schools in the private sector and Indian schools. Also there will need to be some specific adaptations for elementary and secondary schools.

Finally, for this exercise, I assume that the libraries component stays as a separate component and the Teacher Listing Form stays as a way to generate any teacher sample. The question then is what might be done with the Teacher Demand and Shortage/District, Principal, School, and School Teacher questionnaires to make room from items that capture the ideas above?

² Some might ask, why not focus on classrooms? Classrooms are the key point of instruction and are arguably the most basic organizational unit in the formal education process. This is true, but equally true is that inputs made to classrooms and decisions about what occurs there are made at the school-level (or above). Schools are organizations controlling sets of classrooms. Some information from a subset of a school's classrooms might be useful, but the main focus of SASS should be kept on the school as the primary organizational unit of survey.

Teacher Demand and Shortage/District Questionnaire: The Teacher Demand/District questionnaire should be less oriented towards general district programs and more towards whether or not the district sets policy and procedures on issues that correspond to the management of teachers, students, curriculum and other parts of the school. These items should be geared towards the district's school in the SASS sample, not just in general terms about all schools in the district. Some new items will need to be developed. For new items and for many items currently on this questionnaire what needs to be added is some clear indication of the relative control the district (or appropriate LEA) has over the target school vis-a-vis selected areas of school operations. The items should indicate where the relationship between the district and a school is on a range of control from one of "district set enforced policy" to "policy as a guideline with considerable school-level discretion." Also this should be the place where some information is gathered about the influence of state policies and federal policy impact.

Specifically, I would recommend that section A,B, and C of this questionnaire remain basically the same with the addition of some indication in section B about the control of teacher hiring policies at the school level by the district or LEA. Sections D and E should be changed the most. Section D gathers information on several federal programs and one local program of "choice." This section is a mini-survey of districts since none of this is tied to the target school. Also some of these same federal programs are asked about in the school questionnaire. Does NCES need both estimates? Section D needs to be redone; it should provide a picture of how district, state and federal programs have an impact on the target school. It cannot necessarily include all such programs, a sampling is enough, but the key is to capture something about if and how federal, state and district programs have an impact on the target school. Section E should be the place where district policies and governance about each of the main school components are examined as suggested above. I recommend that what is currently in this section E be deleted to make room for new items.

Principal and School Questionnaires: Most of what I have proposed about a more organizationally orientated SASS falls on these two questionnaires. The current Principal Survey asks a number of questions about the principal's background. I would like to see the general area kept, but greatly reduced. Items 1 through 23 and 26 through 30 should be cut down by at least two-thirds. I think just some of the basics about principal background is sufficient. In their place new items should be developed which examine how the administration of this school manages faculty, students, curriculum and outside influence on the school. The decision-making items 24 and 25 should be made more specific along focus described above; right now they are far too general to be of much help. If there is space left after this, here is the place where some information on the principal's management philosophies and approaches should be collected.

The School Questionnaire has four sections. Section A on school characteristics should be kept, but perhaps it could be collected in a less burdensome fashion (see CCD suggestion above). Section B is the basic staffing of the school, which is important to keep, even though it does not tell us much about the direct management of the school's faculty and staff. Section C is on programs and services. I would suggest that this section be re-done and be the section where most of the way the school organizes students and their programs is collected. Some of the programs here are the same ones asked at the district level and if the district items are removed, these will have to stay. My problem here is that most of the programs here are entitlement types for special student populations which may be a small part of what the "average school" does with most of its students. This is the place where some of more extensive information on the curriculum and student flows across courses should be collected. Section D is a mixture of items. Item 33a is important and is the kind that I recommend in general on decision-making. I would give up the other items in the section in favor of a more systematic view of the how the school organizes its main components.

School Teacher Questionnaire: This section of SASS is the hardest to change, but fortunately not much need changed to bring it into line with what I have proposed. The information

collected here provides much of the data for the national profiles of teaching as a profession from a number of perspectives. It has proved very important to NCES as a way to monitor the nation's K through 12th grade faculty in a way not available from any of its other surveys. There are nine sections to this questionnaire, I would suggest keeping most of the items in all sections. Sections A,B,G, and H provide the basic dimensions of the teacher and her/his job. Section I is a small single item on LEP and section J is a technical item. Section C is a long section on training. Much of this captures information on instructional support for the teacher from the target school, so its very useful. Section D is on teaching load. If a new SASS included more school level questions on course structure, some of this might replace the teacher level items in this section. Section E is very important and most of the items are exactly in line with how teachers perceive and experience the school as an organization. While one could quibble with some of the items in this section, in the main, it is very useful to an organizational view of the school from the teacher's point of view.

This example of a way to implement a new organizational SASS does not mean an extensive overhaul of the full survey. The Teacher/Demand District questionnaire is the most changed followed by the Principal and School questionnaires. Most of the School Teacher questionnaire should remain the same with some change in emphasis of some items. Without constructing the actual new items and re-working current items it is hard to tell how naive this implementation plan is, but it is an approximation of what would have to be done to a new SASS. This plan does not include what needs to be done to SASS to incorporate more school level outcomes such as achievement, promotion and so forth (see point IV above).

How Different in Focus Would a New Organizational SASS Be From the Current SASS?

SASS has evolved to have three main foci: 1) teacher demand and shortage; 2) condition of teachers and teaching as a profession; 3) basic organizational structure of schools. And the

importance of the foci in terms of initial questionnaire construct corresponds to the above order.

What I am suggesting here is a reversal of that order. Make the organizational focus more prominent with a correspondingly larger share of space on certain questionnaires; keep the focus on teaching and its profession as the second focus and move the issue of teacher demand and shortage to be the third focus.

I suggest lowering the emphasis of SASS on teacher demand and shortage for several reasons. Although I think that the general area of supply and demand is useful and there has been some valuable work done on this for NCES, it might be that too much of SASS is used for this purpose. From past work we now know how to estimate basic supply and demand models efficiently from relatively few variables, the real question is how detailed and nuanced do we need to make the estimates by adding further variables (Boe and Gilford 1992). Given that the issue of supply and demand for teachers has not proved to be the large policy issue that it was once thought to be, perhaps NCES should only provide the most basic estimate of teacher supply and demand. For example, does NCES currently need estimates of teacher supply and demand from both a district and school perspective. I understand that aggregated estimates are built-up from the unit below (Barro 1992), but if we have good state estimates constructed from district data would not that be enough to provide information about the general issue? And if this basic data indicated a large problem or other related issues arose, perhaps supplemental surveys could be used for a more detailed assessment.

Organizational Theory and the New SASS

Perhaps the most useful of NCES surveys are those which correspond to strong research literatures and theories which in turn have a major impact on educational research and policy. This kind of a connection links a NCES survey to a research field and related policy domains. This is helpful in both the development of the survey and in maximizing the influence the gathered

information has on the education establishment. The link between assessment and psychometric theory and NAEP, and the link between both adolescent development and educational attainment theory and HS&B/NELS are two examples of NCES surveys which are strengthened by this kind of a connection. An advantage of shifting the focus of SASS to a broader organizational one is the ability to have SASS correspond to the large literature on organizational theory.

The proposed approach is in line with what research and theory on organizations in general, as well as on schools as organizations in specific, would suggest about planning an organizational database on schools. Needless to say, the literature on formal, complex organizations and the parallel one on schools as formal, complex organizations is too voluminous to review here. But there are several important lessons from these literatures that are helpful in designing a new organizational SASS.³

- 1) **Although formal organizations have far more "sloppiness" in their boundaries than originally assumed, they are observable and can be studied as organizations.** Where an organization stops and starts is not as easily determined as what was once thought. Research on all kinds of organizations in both the public and private sectors show that formal organizations have a certain fuzziness to their boundaries. A school may be a school, but it is also part of a district or a set of private schools. Or a PTA is a part of a school but it is also an organization within a school which also has connections outside of the school and so forth. Nevertheless organizational research has coped with these characteristics of formal organizations and has shown that by in large organizations such as schools can be assumed to have enough of a traceable boundary to make them a suitable entity for study. So it is possible to consider organizations such as schools as discrete units that can be the focus of a survey. Past SASS's have already shown this to be operational. The new SASS proposed

³ Just a few citations are offered in the following sections as examples on the larger literature on each point; they do not represent a full review.

here would increase the focus on the school as the main unit of the survey with, as is now the case, supporting data collected from teachers and districts or LEA's.

- 2) **Organizational actors can provide reliable and accurate assessments of collective processes that make up an organization.** This is a basic tenet of organizational research. Surveying people holding an organizational role is often used as a method of collecting information about organizations. There are, of course, some problems with having individual actors represent whole organizations, but these problems turn out to be no greater and not very dissimilar from problems with surveying individuals about themselves. Additionally, surveying actors about organizations has the advantage of providing multiple views through multiple actors, as has been used in SASS reports on schools and teaching conditions derived from aggregated information from teachers at the same school (e.g. Ingersoll and Bobbitt (1995). Organizations offer the additional advantage of generating other useable sources of information about themselves such as administrative records and financial records (e.g. Scheuren 1995).
- 3) **Technical processes within organizations that connect an organization's goals to its output are far less tightly coupled than was once assumed, making information on social organization more informative than information on organizational structure.** The way most organizations work, or how they move from goals to means to ends, is best characterized by an image of "loosely coupled" connections (Weick 1979; Orton and Weick 1990). This particularly true of schools. The outcomes of achievement and socialization of students are not easily connected to many of the processes within the school. In other words, a mechanical view of schools as organizations is too simplistic to understand how schools really work. Observing the process of management and the social organization of schools instead of just the structure of schools leads to a more accurate understanding of schools (Barr and Dreeben 1983; Weick 1982). Expanding the organizational scope of SASS to examine

organizational processes is consistent with the widely accepted "loosely coupled" perspective on the way organizations work.

- 4) **Organizations are less rational than they were once thought to be.** This central observation about organizations suggests that they not infinitely rational, rather organizations use a form of "bounded rationality" (Simon 1955). This idea is related to point 3 directly above, but adds to it the notion that decision-making in organizations is the key operation to observe to determine their basic essence (March and Olsen 1976). And further, decision-making is also not mechanical but a very compromised process. The point then for SASS is to collect information on how the workings of an administrative system in a school makes decisions, exerts control, and how that same administration can ignore other areas (Hannaway 1989). This kind of information will yield a more accurate description of schools for policy-makers interested in school reform.

Why a Database on Schools as Organizations?

As mentioned, there are four main reasons why I recommend that SASS be renewed. Let me briefly describe each one.

Reason 1: What SASS has become. A recent NCES working paper noted that "SASS is an unusual education survey" (Ingersoll 1995). Meaning perhaps, that the reason behind the original design of SASS and its intended statistical contribution are very different from other NCES surveys. SASS was not designed to measure the academic progress of k-12th grade students, nor was it designed to measure the impact of schools on academic learning, nor was it designed to weigh the costs and benefits of federal educational entitlement programs. SASS was originally designed to provide information on K-12th grade teachers, with special emphasis on teacher supply, demand and quality. But in the course of doing that, SASS has also provided information on schools. It is the

only NCES data set in which large portions of the survey were designed around the school as a unit of analysis. The teacher sample is representative of teachers, but even here a significant portion of the information gathered refers to the teacher's school. Without maybe initially intending to do so, SASS has evolved in the direction proposed here.

Reason 2: A new SASS strengthens NCES' overall statistical program. When I consider the full array of NCES' K through 12th grade' statistical program, I am always struck by several weaknesses among what is otherwise a strong program. In general, I think that too much of the K through 12th grade program is focused on student level information. In part this was set historically by earlier concern over the effects of federal programs on individual students, such as in the original motivation behind the design of HS&B to assess federal programs and college attendance. But it is also a function of the importance of measuring student achievement and the role that the Department of Education has come to play in education. Programs for special populations and summary evaluations of national achievement merge into a powerful logic for NCES to examine what students learn and how they are progressing in school. To some degree, what has been pushed out of the way by this strong agenda is a program more balanced with information on how schools are organized.

The lack of a survey chiefly dedicated to schools as organizations, instead of the schooling of students or the achievement of students, is a weak point that leads to some peculiar holes in NCES' reporting. For example, as I mentioned above, NCES should be able to report much more about the K through 12th grade curriculum and how it is implemented in schools. It is really a gap when NCES can not provide more information on such a central component of schooling. A related example is that NCES needs to be able to report on how schools react to various policy changes and reforms over time. Federal policy-makers are often interested in precisely this question, and increasingly state educational agencies are too. Without a survey dedicated to schools, this becomes very difficult to do. (I take up the issue of school reform and a new SASS below.)

Reason 3: SASS has accrued an impressive set of technical capabilities about surveying school. Faced with the task of developing nationally representative samples of the wide variety of K through 12th grade schools in the country, the SASS project over the past decade has generated significant and sophisticated technique in surveying schools. Representative surveying of any population of organizations can be difficult given the complexities of population dynamics of organizations (e.g. Hannan and Freeman 1989). Births and deaths of organizations can be rapid, transformations of organizational boundaries often occur, and these, plus other similar phenomena, are not necessarily spread randomly throughout a population of organizations-- in short a survey design nightmare. A survey of schools faces the same problems. For example, significant private sector of schooling in the U.S., which accounts for about one fourth of all secondary schools, offers a particular challenge to a survey. Similarly, the local administration of public schools in terms of mergers, births and deaths makes surveying organizations just within the public sector difficult. In addition to sampling challenges, developing reliable and valid questionnaires for actors within organizations is also a major undertaking. As is evident from substantive SASS reports and the project's own technical assessments, the SASS team has the ability to generate representative samples of schools and collect useful organizational information beyond a survey of teachers or staffing needs. This is a major capability that should be enhanced further. It has the potential for NCES equal to that of the assessment capabilities accrued from NAEP. NCES should recognize this and build upon it.

Reason 4: A new SASS would be an important vehicle to add to NCES' capability to provide information on school governance, finance and reform. Because these three areas are the focus of much discussion throughout the American education establishment, they will remain as important topics for NCES for some time. Most of what I have already proposed is directly related to school governance, which is essentially another term for school management (Raywid 1991), so not much more needs to be said about this as a reason to undertake a new organizational SASS. Similarly the importance of SASS's contribution to reporting how financial resources are turned into classroom

resources has been described above (section III of study perspectives). So far I have said little about school reform and a new SASS even though it is a prime example of why an organizational SASS should be done. This is explored in the next section.

A New SASS and Information about School Reform

Even though school reform is central to the SASS planning process, I have waited to discuss it until after establishing the idea of an omnibus organizational survey of schools which does not necessarily focus on any particular reform or restructuring trend. I did this for two reasons, first, because of what I see as the nature of reform in the American system and second, because of what I will recommend NCES do to capture relevant reform information.

There is a paradox about school reform in the U.S.: the country provides a large amount of school reform movements but the content of these reforms is mostly cyclical. Over the past century there has at any one point in time been ample, sustained and serious interest in reform schools. And these reforms have had consequences; the development of the age-graded school, the Carnegie unit and the core academic curriculum, school racial desegregation, and ability grouping are some examples of defining educational reforms (e.g. Mirel 1994). But while there is the image when the system needs fixing a suitable reform is fashioned, it is rarely this simple. Reforms at any point in time represent political positions about schools that can extend beyond to larger political orientations. Shifts in the content of reform are shifts in political power. Deciding the content of educational reform often pits a host of local concerns, resources and political orientations against often competing educational professions and loosely linked national business and national political parties (Manlove and Baker 1994). The ups and downs of political movements have much to do with what is important educational reform at any point in time.

This makes it difficult for a statistical agency like NCES to plan long range surveys about particular school reforms. Although reform in general is a constant topic of deep interest within the

American education establishment, it is difficult to decide what exactly should be addressed within an ongoing statistics program. What is "hot" today is not tomorrow, but it may be back in ten years. If a project like SASS, which plans to be a long term series of surveys, is initially too oriented toward a particular trend in education it runs the risk of eventually becoming irrelevant with the rise and fall of specific reform issues. And irrelevancy is the worse of all possible fates for any statistical program. Therefore I would recommend that no matter how fundamental, how trendy, how earth-shattering any single issue seems for the country's educational establishment at any point in time, NCES should not establish major, long term, surveys around such issues. Rather the key is to think of ways to capture information about reform without being tied to any one particular trend over a lengthy time.

A omnibus survey proposed here offers a flexible way to collect information about reform without falling into the trap of reform cycles. This kind of a SASS offers a reasonable organizational baseline from which to undertake supplemental surveys of particular reform issues aimed at schools. In the year or so after the main data collection, FRSS's or similar means to collect information on a sub-sample of SASS schools could be used for specific reform issues. Then this information can be merged with the larger organizational database for a powerful set of information. The curricular tracking FRSS, using this design, has shown that this is technically feasible, reasonable efficient, tolerable on school response burdens, and analytically profitable. A variation on this idea would be separate modules of questions about specific reform issues given to sub-samples within the overall SASS sample during the major data collection. Maintaining a basic survey of school organization at regular intervals with the option to combine this smaller, focused data collections on passing issues of concern to the American education establishment is a efficient and flexible way for NCES to stay current.

Finally it should be pointed out that the current school reform movement happens to be heavily oriented towards some of the school management issues that I recommended a new SASS collect (e.g. Elmore 1992). This, in the short term, is one additional advantage to what is proposed

here. But given what the history of educational reform movements in the U.S. shows, I would not predict this particular focus will last. The content and focus of reform will surely change, but a flexible combination of an omnibus survey of school organization and other supplemental collections will continue to be the best way for NCES to provide a wide range of information about the nation's elementary and secondary schools and any reform issues.

References

- Baker, D., Alsalam, N. and Smith, T. 1994. "Thoughts on a New Organizational Survey of American Schools" Internal Memorandum, NCES.
- Baker, D., Ralph, J. and Manlove, J. Forthcoming **Curricular Tracking Policies and Practices in American Public High Schools** NCES.
- Barr, R. and Dreeben, R. 1983. **How Schools Work** Chicago: University of Chicago Press.
- Barro, S. 1992, "Models for Projecting Teacher Supply, Demand, and Quality; An Assessment of the State of the Art" In Boe, E. and Gilford, D. (eds.) 1992 **Teacher Supply, Demand and Quality** Washington DC: National Academy Press.
- Boe, E. and Gilford, D. (eds.) 1992 **Teacher Supply, Demand and Quality** Washington DC: National Academy Press.
- Brewer, D. and Stasz, C. 1995. "Enhancing Opportunity to Learn Measures in NCES Data." NCES Commissioned Paper.
- Coleman, J., Campbell, C., Hobson, J., McPartland, J., Mood, A., Weinfeld, F. and York, R. 1966. **Equality of Educational Opportunity** Washington DC: US Government Printing Office.
- Elmore, R. 1992 **Restructuring Schools: The Next Generation of Education Reform**, San Francisco: Jossey-Bass Publishers.
- Hannaway, J. 1989. **Managers Managing: The Workings of an Administrative System**. New York: Oxford University Press.
- Hannan, M. and Freeman, J. 1989. **Organizational Ecology** Cambridge MA: Harvard University Press.
- Ingersoll, R. 1995 "An agenda for research on teachers and schools: Revisiting NCES' Schools and Staffing Survey." NCES Working Paper 95-18.
- Manlove, J. and Baker, D. 1995. "Local constraints on opportunity to learn mathematics in high school" In Hallinan, M. (ed.) **Making Schools Work; Promising Practices and Policy**.
- March, J. and Olsen, J. 1976. **Ambiguity and Choice in Organizations** Oslo Norway: Universitetsforlaget
- NCES 1994 **Curricular Differentiation in Public High Schools** US Department of Education NCES 95-360.
- Orton, J. and Weick, K. 1990. "Loosely coupled systems: a reconceptualization." **Academy of Management Review** 15, 203-223.

- Raywid, M. 1992. "Rethinking school governance." In Elmore, R. 1992 **Restructuring Schools: The Next generation of Education Reform**, San Francisco: Jossey-Bass Publishers.
- Scheuren, F. 1995. "Opportunities for making more effective use of administrative records in surveys of elementary, secondary, and postsecondary education.' Paper presented at NCES' "Future NCES Data Collection: Some Possible Directions" November 1995.
- Simon, H. 1955. "A behavioral model of rational choice." **Quarterly Journal of Economics** 69:99-118.
- Weick, K. 1976 "Educational organizations as loosely coupled systems." **Administrative Science Quarterly**, 21, 1-19.

Listing of NCES Working Papers to Date

<u>Number</u>	<u>Title</u>	<u>Contact</u>
94-01	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-05	Cost-of-Education Differentials Across the States	William Fowler
94-06	Six Papers on Teachers from the 1990-91 SASS and Other Related Surveys	Dan Kasprzyk
94-07	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
95-01	Schools and Staffing Survey: 1994 papers presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk

Listing of NCES Working Papers to Date (Continued)

<u>Number</u>	<u>Title</u>	<u>Contact</u>
95-04	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings
95-06	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings
95-07	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-08	CCD Adjustments to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk
95-10	The Results of the 1991-92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation	Dan Kasprzyk
95-11	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
95-12	Rural Education Data User's Guide	Samuel Peng

Listing of NCES Working Papers to Date (Continued)

<u>Number</u>	<u>Title</u>	<u>Contact</u>
95-13	Assessing Students with Disabilities and Limited English Proficiency	James Houser
95-14	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
95-15	Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Follow-up Survey	Sharon Bobbitt
95-16	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-17	Estimates of Expenditures for Private K-12 Schools	Steve Broughman
95-18	An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey	Dan Kasprzyk
96-01	Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study	Dan Kasprzyk
96-02	Schools and Staffing Survey (SASS): 1995 Selected papers presented at the 1995 Meeting of the American Statistical Association	Dan Kasprzyk
96-03	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
96-04	Census Mapping Project/School District Data Book	Tai Phan

Listing of NCES Working Papers to Date (Continued)

<u>Number</u>	<u>Title</u>	<u>Contact</u>
96-05	Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey	Dan Kasprzyk
96-06	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy	Dan Kasprzyk
96-07	Should SASS Measure Instructional Processes and Teacher Effectiveness?	Dan Kasprzyk
96-08	How Accurate are Teacher Judgments of Students' Academic Performance?	Jerry West
96-09	Making Data Relevant for Policy Discussions: Redesigning the School Administrator Questionnaire for the 1998-99 SASS	Dan Kasprzyk
96-10	1998-99 Schools and Staffing Survey: Issues Related to Survey Depth	Dan Kasprzyk
96-11	Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance	Dan Kasprzyk