Presented: March 4, 2005



National Assessment Governing Board

Ad Hoc Committee on NAEP 12th Grade Participation and Motivation

Preliminary Recommendations for Discussion With the National Assessment Governing Board

Preamble

The Nation's Report CardTM, or the National Assessment of Educational Progress (NAEP), at the 12th grade must rely on the interest, endorsement, and active support of superintendents, principals, and teachers to encourage students to participate and try hard. These are the people closest to the students who, students have told us, have the greatest influence on their decision to participate.

However, superintendents, principals, and teachers—historically—have been given the least reason to support and encourage participation in the Report Card at the 12th grade. If the Nation's Report Card does not change its orientation to make participation attractive to superintendents, principals, and teachers, the prospect of the 12th grade Report Card becoming extinct looms as a distinct possibility.

The Ad Hoc Committee on NAEP 12th Grade Participation and Motivation recommends major changes—a paradigm shift—in the way the Nation's Report Card is explained to participants at the 12th grade. There must be a sharper focus on the mission and purpose of the Report Card at the 12th grade. The benefits of participation must be made clear, relevant, and attractive. Much more time and resources must be devoted to personal communications with the superintendents, principals, teachers, and students who will be affected.

The paradigm shift being recommended is the following—from trying to get "more data, better" to serving the "customer" better—the superintendents, principals, and teachers whose active support will be needed and the students who will sit for the assessment.

Consistent with this goal, the Ad Hoc Committee developed the following set of recommendations. A clearer mission and purpose, tied to communicating the benefits of

participation in more direct, personal ways, along with feedback to participants, is the centerpiece. An important part of this is the first recommendation:

1. "Sell" participation in the 12th grade Nation's Report Card based on the benefits of proposed statewide professional development conferences

Shortly after the 12th grade state sample is drawn, usually 6–12 months before the assessment, an experienced educator, knowledgeable about the content of NAEP, would meet inperson with the superintendent, principal, and teachers (perhaps the Department chair and others) who teach the subject(s) being assessed. Assuming that 12th grade testing is moved to the fall (see recommendation 5, below), this meeting will occur in the school year prior to testing. In the meeting, the purpose and mission of NAEP are explained and the test framework(s) is reviewed. A demonstration is provided showing the ease with which NAEP questions and data can be accessed via the Internet. The NAEP representative provides assurance that NAEP data will not be reported in a form that can be used to "harm" schools, teachers or students, result in school rankings, or produce individual student score reports to the schools. The principals and teachers are given the opportunity to ask any questions they may have about the assessment.

The NAEP representative then makes the following offer, designed to demonstrate how participation can have practical, useful benefits:

If –

- (1) the principal and teachers agree to explain to students why their participation is important, describe how it will be of benefit; and encourage the students to take the test seriously;
- (2) "X" percent of the students selected for the sample actually take it; and
- (3) objective indicators applied to the test administration indicate that the students were appropriately engaged in the testing process,

then a team from the school will be invited to a statewide conference/workshop, hosted and facilitated by the State Education Agency, to review with peers from other participating high schools, relevant state and local data, along with the state's NAEP results, with the aim of using all of the data to inform discussions about ways to improve student achievement. The financial resources to conduct the meeting would be provided by the NAEP program, but the agenda and content of the conference would be under the complete control of the State Education Agency.

After the school agrees to participate, the NAEP representative remains in contact with the school, answering questions about NAEP, providing relevant NAEP reports as they are released, and supplying information and resources about NAEP to be used by teachers with students in explaining why their participation is important. Before the end of the school year, the State's 12th grade NAEP data are made available and the statewide conference/workshop is conducted for the teams from the NAEP participating schools.

2. Mission and Purpose of 12th Grade NAEP

The National Assessment Governing Board should adopt a mission statement for the Nation's Report Card at the 12th grade that explains its purpose in clear prose and provides compelling reasons for superintendents, principals, teachers, and 12th grade students selected for the sample to participate and for the students to put forth appropriate effort in taking the assessment.

The majority of the American public is virtually unaware of the existence of the Nation's Report Card at the 12th grade. Worse yet, NAEP is unfamiliar to the very superintendents, principals, teachers, and students who must be relied upon for the assessment's successful implementation. NAEP's mission and purpose were either unknown to or only vaguely understood by the more than 500 students, parents, and school staff interviewed in focus groups conducted for the Governing Board. Interviews with over 100 individuals from the private sector found a similar lack of familiarity with NAEP. In informal surveys conducted by Governing Board staff at professional meetings, fewer than one in six say they have even basic knowledge about the Nation's Report Card. This widespread lack of knowledge about 12th grade NAEP among the schools and students selected for the 12th grade sample is a massive barrier to participation.

The first step in overcoming this barrier is the development of a clear, persuasive mission statement for NAEP. It will be based on the NAEP legislation and on the Governing Board's decisions on the recommendations contained herein.

3. Communications With NAEP Participants

The Governing Board should adopt policies and prepare materials that will significantly alter and improve the effectiveness of communications with NAEP participants consistent with the principles below. The Governing Board should encourage the National Center for Education Statistics (NCES) to implement these principles, both directly and through their contractors:

- 1. Greater emphasis should be placed on person-to-person communications with the superintendents and principals who will be deciding whether to participate, the teachers who will be asked to encourage students to put forth reasonable effort, and to the students to help them understand what the benefits are of their participation.
- 2. Superintendents, principals, and teachers should be given persuasive, compelling reasons to participate in 12th grade NAEP. The approach should appeal more to their professional interest in improving achievement rather than in meeting legal requirements or altruism.

- 3. Principals and teachers should be (a) asked explicitly to explain to students why their participation is important and what the benefits will be, and (b) given materials and other resources (including appropriate incentives) designed to be effective in eliciting student participation and appropriate effort.
- 4. Representatives of the NAEP program who meet directly with superintendents, principals, and teachers to elicit their commitment to participate in 12th grade NAEP should (a) be knowledgeable about and committed to the mission and purpose of the Nation's Report Card, (b) be recognized for their educational expertise, and (c) possess strong oral and written communication skills.
- 5. All communications to participants, both oral and written, should explain the mission and purpose of the Nation's Report Card in clear and compelling terms; provide information about the content of NAEP frameworks; be persuasive about the reasons for and benefits of participating; be appropriately targeted for superintendents, principals, teachers, students, and parents; and ask superintendents, principals, and teachers explicitly to encourage participation in the assessment.
- 6. Communications should be specifically developed for nonpublic schools, addressing the unique barriers to participation they experience.

A dramatic "paradigm shift" in communications—both in message and messenger—is needed for the NAEP program. StandardsWork—a contractor hired by the Governing Board—reviewed the communications the NAEP program provides to high schools selected for the NAEP sample. StandardsWork found the following:

- The written materials focus primarily on procedures and requirements related to the conduct of the assessment rather than on the purpose and importance of the assessment and why it is in the interest of the schools to encourage students to participate.
- Students are largely ignored in the materials sent to schools and the letter that is directed to students "lacks credibility" with students.
- The tone and content of the current written communications are plaintive, authoritarian, bureaucratic, and compliance oriented rather than engaging, persuasive, and oriented toward inspiring action to encourage quality participation. A sample of a letter sent to principals selected for the sample was viewed as a "classic form [letter], written by no one in particular and sent to no one in particular."
- There is little to no emphasis on the quality of the test frameworks and the content of the assessment, although most principals and teachers would want to know the value of a test before giving up class time.

- In-person contact with schools is limited to "converting refusals" to participate, a missed opportunity to engage principals and teachers on the importance and benefits of participating and in gaining agreement of principals and teachers to encourage their students to participate.
- In sum, the materials and approaches to communications as currently conceived are more likely to discourage participation than to foster it.

StandardsWork reported a consistent refrain throughout the interviews and focus groups conducted with superintendents, principals, teachers, and students: Principals, teachers, and students must be (1) given a clear understanding of NAEP's mission and purpose, and (2) be persuaded that the mission and purpose are important, relevant, and beneficial to them. Accomplishing this is an essential first step in gaining the cooperation of principals to agree to have their school participate, teachers to encourage students to show up for the assessment and try hard, and for students to take the assessment seriously.

Governing Board staff met with representatives of private schools to determine the barriers to participation and possible solutions. Generally, private schools are autonomous; they are not subject to control or direction by central authorities. The primary strategy the NAEP program has employed is to obtain a letter of support for participation in the Nation's Report Card from the school's parent organization and to use this as leverage. However, the private school representatives noted that such letters are viewed as advisory and nonbinding on the school head, in contrast with a directive that might come from a school district superintendent. Private schools view their programs as unique in ways that would not be captured in a national assessment. This sector wonders, in particular, "What are the benefits of participation to nonpublic schools?" and worries that the data will be used in ways inimical to their interests e.g., through the rankings of schools. Concern also was expressed about the manner in which some of the staff working for the data collection contractor approach the private school participants and suggested that the staff be trained specifically in more effective ways to approach private schools. As was the case with the public school respondents in the StandardsWork research, private schools want to know the mission and purpose of the Nation's Report Card and the benefits of participation. Consequently, communications aimed at gaining the support of the head of a private school will require compelling answers to the unique issues they raise.

A "Paradigm Shift"

What might a "paradigm shift" in communications look like? The primary elements would include a shift:

- from the use of written communication as the primary means of eliciting participation to personal communication;
- from law, regulation, and altruism being the primary reason for participation to mission, purpose, and benefit to school improvement being the primary reason;
- from a focus solely on administrative process and checklists to a greater emphasis on the benefits arising from participation.

4. Preparedness for Postsecondary Pursuits

The Governing Board should review—and revise as needed—the test frameworks, test items, and achievement levels used in the Nation's Report Card with the objective of reporting 12th grade students' preparedness for college-credit coursework, training for employment, and entrance into the military.

The Ad Hoc Committee recommends unanimously that the Nation's Report Card should report on "preparedness." With a compelling purpose attached to the Nation's Report Card, principals, teachers, and students will have a good reason to participate. The importance of "preparedness" as a purpose is clear and the NAEP 12th Grade Commission expressed it well:

"...[twelfth] grade is the major point of transition to higher education, training for employment, and entrance into the military. There currently is no dependable source of information about the readiness of 12th graders for these destinations, but that information is critically important and NAEP is uniquely positioned to provide it.

Thirty-five years ago and more, a high school diploma was the primary target of education. At the time, it was considered a sufficient prerequisite for getting a job that could sustain an individual and a family and adequate preparation for meeting civic obligations. Today, this is hardly true at all. The earnings gap between those with only a high school diploma and those with postsecondary education and training has widened substantially and the technological/scientific, legal, and moral complexity of today's public policy issues require more to be an "informed citizen" in a democracy.

As our economy moves increasingly from production to service, from manufactured goods to information, from line workers acting in isolation following specific instructions to workers acting collaboratively making independent decisions, and as using technology becomes a part of more job descriptions, a high school education will no longer suffice.

Similarly, expectations are changing for the majority of students about the endpoint of formal education. Today, approximately 88 percent of eighth grade students say that they want to attend higher education and about 70 percent of high school graduates do enroll in postsecondary education and training within 2 years after graduating. However, possession of a high school diploma in itself often does not equate with the competencies needed to be ready for college credit course work or for training for high performance jobs. Many students are finding themselves accepted into college, but—often to the surprise of their parents and themselves—enrolled in "remedial" or "developmental" classes in reading, writing, and mathematics. This adds costs to a college education, increases the time needed to earn a degree, and has the greatest negative impact on low-income students—the very students most at risk of not finishing. NAEP would provide an

¹ Kirst, Michael; "College Preparation and Grade 12 NAEP"; paper prepared for the National Commission on NAEP 12th Grade Assessment and Reporting; August 2003.

important and needed service by reporting on the readiness of 12th graders for postsecondary learning—that is, for higher education, training for employment, and entrance into the military—and by illustrating in its reports the competencies that reflect such readiness."²

Support is widespread and growing for the goal of ensuring that high school graduates are well prepared for the futures before them. The National Association of Secondary School Principals has long advocated for high school reform and acknowledged the importance of "Preparing students for a successful postsecondary future—whether in the workplace or on a campus..." The National Governors Association (NGA) has adopted high school reform as a major initiative. According to NGA Chairman Governor Mark Warner, "This year, states will begin to implement changes in high schools themselves and to rethink expectations for postsecondary education and workforce success." President Bush has proposed a high school reform initiative designed "to ensure that every high school student graduates with the skills needed to succeed in college and in a globally competitive workforce."

Redesigning the Nation's Report Card to report on the preparedness of 12th graders for college-credit coursework, training for employment, and entrance into the military is relevant, timely, and needed. It will require a comprehensive review of test frameworks, questions, and achievement levels. Focusing NAEP's purpose at the 12th grade on "preparedness" will serve the emerging consensus and, thus, vastly increase its usefulness and use. In turn, the evident importance of the NAEP data will provide a persuasive and compelling reason for schools and students to participate seriously in NAEP.

5. Time of Year for Testing

The Governing Board should change the time of year for testing 12th grade students from the late winter to late fall.

Anecdotal evidence has suggested that there would be advantages to administering NAEP at the 12th grade in the late fall of the senior year (e.g., November-December) rather than the late winter (i.e., the last week in January through the first week in March). This anecdotal evidence was strongly confirmed through the interviews and focus groups StandardsWork conducted with superintendents, principals, teachers, and students.

The advantages of changing the testing time include: having test taking occur prior to the so-called "senior slide" that is reported to occur in the second semester of the senior year; a greater likelihood that students will participate in the assessment and take it seriously; the general lack of other state or school-based standardized testing targeted at 12th grade; and, with 6-month reporting for reading and mathematics being feasible, the possibility of reporting results before the students graduate.

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² National Commission on NAEP 12th Grade Assessment and Reporting; "12th Grade Student Achievement in America: A New Vision for NAEP"; March 5, 2004.

There are, however, some potential disadvantages. First, there is uncertainty about being able to schedule the assessments in high schools in the late fall. Second, there are questions about whether fall results truly represent "12th grade achievement," especially in mathematics. Third, if fall results do not represent "12th grade achievement," the ability of NAEP to report on "preparedness for higher education" may be constrained.

While it is clear that changing the testing date to the late fall is likely to have beneficial effects on participation and effort, this must be balanced against threats to being able to report validly on "preparedness." Ultimately, the Governing Board will need to make this determination. However, the Ad Hoc Committee recommends that NAEP 12th grade testing be moved from the late winter to the late fall.

6. Feedback to Schools and Students

The Governing Board should investigate whether (a) feedback to high schools and 12th grade students who participate in the assessment can be designed that would be legally permissible, technically sound, timely, and potentially attractive (e.g., viewed as useful and not "harmful,") and (b) whether providing such legally permissible feedback would enhance 12th grade participation and student engagement.

Under the NAEP legislation, the aim is to provide national, regional, and state results. There are restrictions and limitations in the legislation with respect to school and student results, which NAEP does not produce. For example, the NAEP legislation prohibits an agent of the federal government from using NAEP items and data "to rank, compare, or...evaluate students or teachers..." and requires the Commissioner of Education Statistics to "ensure that all personally identifiable information about students [and] their academic achievement...and information with respect to individual schools, remains confidential [in accordance with the Privacy Act]..."

However, StandardsWork found from its interviews and focus groups with principals, teachers, and students that the lack of information available to schools and students about performance on NAEP is a significant disincentive to participation. These respondents said that it is important to get something in return for their participation that will be of benefit without bringing "harm" to the school or the students.

As an example, NCES has proposed a method by which 12th grade students who take NAEP could be given a password that they alone could use to access a secure Internet site and retrieve information about their performance on test questions they answered. A legal review of this proposal has not been performed, thus its legal permissibility or impermissibility is not presently known. It is conceivable that permissible means of providing useful information to schools and/or students can be developed. Because the lack of information about performance on the test serves as a potent disincentive to school and student participation in 12th grade NAEP, exploratory research to identify viable options should be pursued.

7. Material Incentives

The Governing Board should recommend that: (1) principals, teachers, and 12th grade students who participate in the Nation's Report Card should receive an appropriate, individualized expression of appreciation in a form they are likely to value rather than discard; (2) stipends to defray costs associated with encouraging 12th grade students to participate and put forth appropriate effort should be provided to each school that achieves "X" percent student participation and should be used as determined at the school; (3) before a decision is made to use material incentives as an ongoing part of the NAEP program, research should be conducted (a) on the extent to which material incentives for students affect participation rates and student engagement and (b) to help determine the bounds of acceptability for categories of material incentives.

Material incentives can take many forms, including certificates, food, special forms of recognition (e.g., receiving an honor chord at graduation, a letter from the Governor, or a plaque for the school), educational materials, "goody bags" for staff or students, chances for a scholarship, and money to the school, to name a few.

There is some anecdotal evidence, from reports of students littering the school hallways with their "certificates of appreciation for NAEP participation" as they leave the testing area, that the current "thank yous" to students are ineffective. More needs to be learned about what forms of appreciation are sent to principals and teachers for their participation and how they are viewed. A "thank you" that sincerely and credibly honors the recipient is a basic requirement of common courtesy and one that must be employed effectively in the NAEP program.

The StandardsWork interviews and focus groups suggest that principals and teachers hold the key to NAEP's successful implementation in a school. It is through the principals and teachers that students will or will not receive the message that their participation in NAEP is important. Explaining NAEP's mission and the benefits of participation will require time and resources on the part of the principal and teachers. It is reasonable and fair to provide funds to defray the associated costs if student participation at the school meets a predetermined level.

If the Governing Board decides that material incentives should be used, care should be exercised not to exceed the boundary of acceptability. Material incentives should be chosen and used in a way that will have a positive effect on participation and effort. No incentive should be used unless it has been shown to foster participation and effort. Likewise, no incentive should be used that has any chance of creating the perception that participation is being "bought," thus cheapening the assessment. Before a decision is made to use material incentives, research should be conducted to determine the impact on participation and effort and to help define the boundary of acceptability that should not be exceeded.

8. Measuring Student "Motivation"

The Governing Board should recommend that the National Center for Education Statistics (NCES) develop objective measures of appropriate engagement in the testing situation by 12th grade students. The Governing Board should set a standard based on such objective measures of appropriate student engagement in the testing situation by 12th grade students, below which results would not be reported or would be reported with appropriate caveats.

The central question for the viability of national 12th grade NAEP is the participation rate at the school and student levels. School and student participation rates at the 12th grade have been declining to a point at which the credibility of NAEP is at risk—in 2002 the 12th grade school and student participation rate fell to 55%, the lowest level ever. This is a fundamental problem that demands serious action. An adequate participation rate is necessary for 12th grade NAEP to continue as a viable assessment program. If an adequate participation rate cannot be achieved, the future of 12th grade NAEP is at risk. If adequate participation rates can be achieved and 12th grade NAEP remains national only, it is likely that questions will continue about whether the results reflect students' best efforts, so some steps should be taken to address these questions.

However, as the research has shown, "motivation" is a construct that cannot be measured directly. Further, the evidence on whether students are trying their best on NAEP is inconclusive—for example, students who said they didn't try hard on NAEP had much higher scores than those who said they tried hard or very hard. Whether, or the extent to which, 12th grade students are or are not trying hard on NAEP has not been established.

Under a scenario in which state level 12th grade results would be reported, it is likely that "motivation" would be a major concern. Without evidence that addressed student effort, the results, likely, would be questioned at best or disregarded at worst. Without the prospect that such evidence would be provided, it is likely that states would decline to participate, if participation were voluntary. If participation were mandatory, states would be in a position to argue that the results are invalid, if such evidence were not provided.

Based on its research and discussions, the Ad Hoc Committee has maintained that 12th grade student motivation on NAEP cannot be measured directly and that instead, objective indicators of student engagement in the testing situation should be developed and employed. The underlying premise is to provide information that is objective and measurable, that would provide reasonable assurance that students were acting in accord with the testing demands, and that would have to be refuted with other compelling evidence to demonstrate that the 12th grade results were invalid due to lack of student effort.

The implications of the Ad Hoc Committee discussion are that:

(1) objective measures of 12th grade student engagement in the testing situation should be developed and utilized; and

(2) a standard should be set with respect to such evidence below which results would not be reported, or would be reported with caveats.

Consequently, the Ad Hoc Committee recommends that objective measures of 12th grade student "engagement" in NAEP be developed and piloted as a part of the 2006 assessment.

9. Responsibility for the Adequacy of the 12th Grade Sample

The Governing Board, through adoption of a policy statement, should clarify the responsibility for achieving the adequacy of the 12^{th} grade sample as follows:

- a. While the NCES is responsible for the conduct of the Nation's Report Card in a manner that produces valid, reliable results, and, thereby, for achieving a technically adequate 12th grade sample,
- b. the Governing Board is responsible for setting technical standards for the Nation's Report Card.
- c. Therefore, the Governing Board shall adopt technical standards for both the adequacy of the 12th grade sample selected for the Nation's Report Card and for reporting the assessment results, for implementation by NCES.

The Governing Board's charge to the Ad Hoc Committee involves two primary objectives: improving school and student participation rates and addressing the degree to which students who show up for testing put forth reasonable effort.

Improving school and student participation rates is a necessary condition for the future viability of the Nation's Report card at the 12th grade. But who is responsible for achieving this improvement?

Currently, there are many parties that have a direct hand in the quality of the NAEP 12th grade sample: the Governing Board, the National Center for Education Statistics, and, through contracts awarded by NCES, the sampling and data collection contractor and the respective NAEP state coordinators. Within the NAEP "system," significant energy is expended in coordination and communication among the parties and well-intentioned, competent, hard work is often in evidence. Collaboration and cooperation characterize the relationships among those charged with gaining the agreement of schools to participate, therefore responsibility is somewhat shared among the partners to the enterprise and, consequently, accountability for attaining a technically sufficient 12th grade sample has never been explicitly pinpointed.

Responsibility for Setting Standards

Under the NAEP legislation, the Governing Board is responsible for setting policy for the Nation's Report Card, which includes designing the methodology and improving the form, content, use, and reporting of results. Through the Ad Hoc Committee's study and deliberations, it came to light that the Governing Board had not adopted standards for the technical sufficiency of the NAEP 12th grade sample and for reporting 12th grade results, although the Governing

Board had set such standards for state-level NAEP. The National Commission on NAEP 12th Grade Assessment and Reporting concluded that the 12th grade school and student participation rate of 55 percent in 2002 was "too low" and that "action must be taken to improve the school and student participation rates at the 12th grade." One very basic action that should be taken is the setting of standards for the technical sufficiency of the sample and for reporting the assessment results. The adoption of such standards is necessary for the credibility and integrity of the Nation's Report Card. The Governing Board's Committee on Standards Design and Methodology has begun work on the development of standards for the technical sufficiency of the attained 12th grade sample, which will be presented to the Governing Board for consideration.

Responsibility for Achieving a Sufficient Sample

Under the NAEP legislation, the Commissioner for Education Statistics—NCES—is responsible for carrying out the Nation's Report Card, through contracts. Ultimately, this means that the responsibility for achieving a technically sufficient 12th grade sample resides in NCES. Although it is the contractors who perform the tasks necessary for implementing NAEP, it is NCES that is responsible for determining how it will be carried out. NCES specifies the work to be performed by its contractors, defines the constellation of types of contractors that are needed, determines what constitutes adequate performance, decides on any incentives for performance, communicates any needed guidance, disseminates Governing Board policy, monitors the work of the contractors as it progresses, and takes action to anticipate or address problems.

10. Constructed Response Questions

The Governing Board should ensure that the optimal balance between multiple choice and constructed response test items is achieved in each assessment. In choosing item formats for frameworks, test specifications, and test questions, whether to use multiple choice or constructed response items should be determined by the measurement requirements of the test objectives.

There is a concern that constructed response test items may be less efficient than multiple-choice in measuring student achievement. Students taking NAEP omit constructed response items at a higher rate than multiple-choice questions. This is especially true for lower achieving students, who may be discouraged by the demands of producing a response instead of selecting an answer from a set of choices.

The NAEP assessment frameworks, which represent a broad consensus on what is important for NAEP to measure, clearly require the use of constructed response items, however. Constructed response items provide a means for measuring important higher order processes, such as the application of knowledge, critical reasoning, and analytical skills in ways that are not well measured by multiple-choice questions. Constructed response items are necessary in order for each assessment to reflect the requirements specified in the respective frameworks. The goal is to bridge these two positions, so that the assessment remains true to the test frameworks, but in a manner that does not unnecessarily discourage student effort.

11. Public-Private Partnerships

The Governing Board should pursue public-private partnerships with qualified corporations and foundations to encourage participation of schools and students in the Nation's Report Card at the 12th grade and to provide resources in support of specific programs to elicit school and student participation.

Partnerships with the private sector have the potential to enhance school and student participation in the Nation's Report Card. The most direct way that such partnerships could help would be in bolstering resources for related programmatic activities. For example, additional resources would be needed if the Governing Board decides that in-person communications should be expanded to reach out directly to the hundreds of principals and teachers whose support is essential in encouraging 12th grade students to participate.

The Governing Board would not be in uncharted territory in seeking corporate or foundation partners. The research conducted for the Ad Hoc Committee by the Governing Board's contractor, Reingold, Inc., demonstrates that public-private partnerships exist widely among federal agencies. The Department of Education is among the agencies with experience in this area. The Department has executed a number of significant partnerships with the private sector, has model agreements, and has prepared written guidelines that can be useful.

The Reingold research also indicates that many corporations support philanthropic initiatives in education and that a national program, like NAEP, may attract interest. Much would depend on the proposal. For example, according to Reingold, "testing" is viewed as somewhat controversial; therefore, requests for resources to "do more testing better" may not hold much appeal to potential corporate partners. On the other hand, a proposal to support workshops for teachers and principals to improve achievement through indepth analysis and reflection on the meaning of state, local, and NAEP test results might attract support.

Whatever the ultimate proposal might be, it is clear that the Governing Board would have to devote considerable time, effort, and resources should it decide to seek corporate partners.

12. Proposed Research

The Governing Board should recommend that research be conducted in association with the 2006 assessment at the 12th grade in the following areas: (1) developing and evaluating the efficacy of objective indicators of student engagement; (2) evaluating the potential impact of proposed changes in communication strategies to elicit participation in12th grade NAEP; (3) developing legally permissible forms of feedback to schools and students and evaluating their value and impact on participation; (4) evaluating the efficacy of various material incentives on participation and student engagement; and (5) evaluating the impact of new procedures to improve school and student participation on measuring trend.