DOCUMENT RESUME

ED 387 942 EA 027 142

AUTHOR Sewall, Angela Maynard
TITLE National Goals and National Assessment: Impact and Effects on K-12 and Higher Education.
PUB DATE Nov 94
NOTE 18p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (Nashville, TN, November 9-11, 1994).
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Standards; *Educational Assessment; *Educational Objectives; Elementary Secondary Education; Evaluation Utilization; Federal Government; Government Role; Government School Relationship; Higher Education; Measurement; *National Curriculum; *Standards; State Standards; Student Evaluation
IDENTIFIERS *Goals 2000

ABSTRACT

This paper argues that education in the United States will be increasingly intertwined with and impacted by federal expectations, requirements, and standards. The paper describes the impacts and effects of national goals and national assessment on K-12 and higher education. A review of state and federal responses to "A Nation at Risk" concludes that the Clinton Administration's Goals 2000: Educate America Act has led to a partnership among federal, state, and local educational entities and a commitment to educational improvement. The basic questions that must be answered in light of the national goals are: (1) Where are we now? (2) What are we doing? (3) Why are we doing it? (4) How can we measure what we are doing? (5) How can we use the consequent data for improvement? (6) What is the direction that improvement will take? (7) What institutions/levels of government will be the arbiters and assessors of improvement efforts? and (8) How will we know when we succeed in reaching these goals? Other concerns are how to measure against standards if they are transient in nature, and whether testing is conducted to maintain or raise standards. A conclusion is that higher education in partnership with K-12 education will and must play a vital role in determining answers to the many questions regarding the national goals, the national curriculum standards, the probability of national assessment, and the possibilities of what that assessment may be. (Contains 36 references.) (LMI)

National Goals and National Assessment: Impact and Effects on k-12 and Higher education

A presentation to MSERA, November 9, 1994

by

Angela Maynard Sewall, Ed.D.

Associate Professor

Department of Educational Leadership

University of Arkansas at Little Rock

Since the release of *A Nation at Risk* (1983), American educators at all levels in the educational spectrum have been concerned about the implications of the federal stance and what its impact on American education would be. Of course it has been difficult to accept the proposition proposed in *A Nation at Risk* that if we had experienced the imposition of an educational system comparable to our own by another nation, we have would considered that imposition to be an act of war. The issue may not be that we have difficulty accepting the fact that students are not always receiving all that they need by way of an education, but rather that it is difficult to become reconciled with the idea that we, as educators, have somehow failed in such magnitude that we would rate the education which we have provided our youth to be substandard. Additionally, there is a certain hesitancy on the part of educators and citizens in general to accept the possibility that the federal government may assume a role in education which extends beyond that of funding and regulating some few "special" programs such as chapter 1, IDEA, and MSAP (the Magnet Schools Assistance Program). However it is clear, even to individuals who chose to ignore the federal reports of the 1980's and their possible ramifications for the future of education, that education in this country will be increasingly intertwined with and impacted by federal expectations, requirements and standards.

The National Goals developed by President Bush, the National Governors' Association and the USDOE during the Bush administration was seen by some as an interesting but benign set of proposals. Many educators seemed to predicate their lack of concern on the belief that republicans generally did not wish to expand governmental control and that local initiatives were preferable to the national direction of programs. In other words, the federal government might make policy, but it was, as contemplated by the 10th amendment, the purview of the states and local agencies to address educational concerns. Historically, this somewhat complaisant response to the national

goals may well have been predicated on those experiences which many of us had in the 1950's and 1960's when the Russian sputnik was launched (1957) and a national educational panic ensued. The educational concerns about our mathematics and science curriculum and the readiness of American students to compete internationally in these two subjects abated quickly and culminated in only one significant change – the passage of federal legislation which provided support for enhancing mathematics and science education in public schools. That legislation proved to be relatively innocuous. Money was available to schools but the curriculum and the delivery of instruction in those schools changed very little.

In fact, in the 1960's, national standardized test scores began to fall and continued to do so until the past two years. Although the public has consistently bemoaned this fact, few organized curricular or instructional efforts were implemented to address the situation during the period of time from 1965 until 1983. However, since the release of *A Nation at Risk,* changes have emanated from federal, state and local initiatives. In Arkansas alone, standards for classroom instruction, delivery of the curriculum, course contents and class size were developed by the State Department of Education and enacted by the legislature during the mid-1980's. Current reform efforts in that state include but are not limited to changes in licensure for teachers and administrators. Curriculum frameworks have been mandated for development within each school district predicated on guidelines developed at the Department of Education, and a strategic leadership academy has begun to train teachers, administrators, State Department of Education employees, and the CEO's of partner institutions (private businesses and universities) in current educational theory, technology, the change process, planning and other skills necessary to effect change in education.

At the national level, subsequent to the publication of *A Nation at Risk,* the efforts of the USDOE and of the National Governor's Association (NGA) during the Reagan administration resulted in efforts to develop models of educational reform which could be

replicated in districts throughout the nation. These change efforts were scattered and limited in their nature, however, and they produced uneven reform at best. Among the responses was the pilot project by which each of the leading "education Governors" in the NGA selected two sites in his state which were to implement change, focus on site-based management, technology, shared decision making, and educational reform. These sixteen pilot programs, located in Arkansas at two high schools, and in South Carolina, Tennessee, New Jersey, Utah, Missouri, Colorado, and New Hampshire in individual districts, did eventuate in some changes within each school/district, but even with the publication of *Experiences in School Improvement* (1988) by the USDOE, what had been accomplished at these sites did not significantly impact schools elsewhere. No federal financing accompanied these efforts, and in several of the states, no state or local aid was available to assist with the implementation of change. Much of the discussion conducted among the superintendents of these districts and USDOE officials dealt with the need for waivers from the regulations of Chapter 1, ESL legislation and other federal program standards. Although several federal reports were issued relative to project outcomes, the long term impact of these initiatives and the diffusion of data concerning them was limited. Perhaps the best that can be said is that awareness of the fact that some school districts were attempting change was increased and that the USDOE published some excellent literature in regard to research on teaching and learning and change models in elementary and secondary education. Among these publications were: *What Works: Research about Teaching and Learning (1987),* and *James Madison High School (1987).* Additionally, the impetus from the U.S. Department of Education was matched by the publication of helpful reform oriented and research based publications from ETS, NASSP, NAESP and other national educational organizations.

During the administration of President Bush and under the aegis of Education Secretary Lamar Alexander, not only were National Goals proposed but also efforts were made to encourage schools to take on the designation America 2000 schools. This

designation marked a school as being in the process of change, whether through its own vision or in association with some other efforts such as Goodlad's Break the Mold or Sizer's Coalition of Essential Schools. Additionally, limited funding accompanied this designation which gave schools some latitude to provide additional training to staff, to purchase technology, and to reward excellence by providing incentives to change. In 1992, programs implemented within these schools were to focus on meeting of these National Goals, particularly as they related to student readiness and achievement. Typically, America 2000 initiatives were developed and implemented at the local level. Once again, however, replication has been limited.

These initiatives continue today under the law recently signed by President Clinton which is styled Goals 2000: Educate America Act. This act encompassed the six national goals proposed by the NGA and President Bush and adds two more goals which address the need for staff development and awareness and use of technology.

Significantly, all of the efforts put forth since 1983 seem to have come to focus under Goals 2000. Finally, there seems to be emerging a true partnership among federal, state and local educational entities and a commitment to improve the quality of United States education.

What has forged this partnership, this synchrony of effort, which did not exist during the Presidencies of Ronald Reagan and George Bush? To answer that question, consideration must be given to the many directions from which criticism of our educational system has come. Additionally, reflection is important to recall, that critiques of American education began in the 1950's, continued in the 1960's and '70's, seemed to peak in 1983 and have escalated since 1983 both in intensity and frequency. These criticisms have taken on greater urgency with each succeeding decade as more and more research has been done relative to the knowledge and skill bases possessed by our students. Public dissemination of information via books such as *The Troubled Crusade* by Diane Ravitch (1983) and *Cultural Literacy* by E.D. Hirsch (1987)has led to

increased public attention to the problem of student knowledge and the skills, or lack thereof, provided by our educational system. The Gallup polls showed in the 1980's, and continue to show year after year that while Americans may be satisfied with their own schools, they are dissatisfied with the state of American education in general. Systematic comparisons of American students to all other students in the major developed countries of the world and in underdeveloped countries as well has been published in the general press and has increased both public dissatisfaction and pressures on federal, state and local governments to reform American education.

If it is true that "significant changes at the school level are most likely to happen when there is consumer demand for change..." (Davies, 1994), then we in education will find and are finding that our institutions, whether k-12 or higher education, are ripe for significant change.

In the same way that entities like the educational associations, the NGA and states began to impose new standards upon k-12 education, so too in the 1990's, NCATE is imposing changed standards on higher education institutions. Evans Clinchy expressed the basis for such change recently in an article in the Kappan (1994) in which he stated that institutions of higher education should become reconnected with lower education instead of being an "albatross around the neck of public schools" (p. 745). State legislatures are becoming more involved in higher education. Examinations of productivity are underway in several states. Assessment by subject area of student achievement has been mandated by NCATE and mid-career undergraduate standardized examinations are coming into vogue in several states. Finally, questions have been raised concerning the validity of providing remedial assistance (coursework) for matriculating college students at institutions of higher education. John Goodlad noted the need for this linkage between higher education and k-12 education in his book, *Teachers for Our Nation's Schools* (1990), when he spoke of the need for simultaneous renewal

in schools and higher education institutions and of the need for true professional development schools for potential and practicing educators.

Still, even with all of the mandated and contemplated changes in education in the United States, there remain some essential questions which must be answered relative to what the vision is and by what means we will strive to reach that vision. The basic questions which must be answered in light of the national goals are:

- Where are we now?
- What are we doing?
- Why are we doing it?
- How can we measure what we are doing?
- How can we use the consequent data for improvement?
- What is the direction which improvement will take?
- What institutions/levels of government will be the arbiters and assessors of improvement efforts?
- How will we know when we succeed in reaching these goals?

Although these questions must be answered at every educational institution and at each level of educational involvement by faculty and administrators alike, it is appropriate that the major focus be on the national implications of the goals as that is the level at which they were generated for all states and all schools.

Where are we now? We are now under the aegis of the Goals 2000 which goals are quickly evolving into a set of national standards and expectations. This turn of events is not unexpected for these goals are measureable and therefore contain at least some of the components usually found in objec ives within action planning processes. Within the past two weeks, the national social studies standards were released. These standards have implications for higher education as well as k-12 education, just as the National Council of Teachers of Mathematics (NCTM) standards did. It is at the higher education institutions that teachers are trained in the subjects which they will teach and trained as

to the methods which will most effectively be employed in the teaching of those subjects. The national social studies standards suggest those subjects encompassed within the fields comprising social studies with which students should be conversant in order to meet the standards. As in the case with mathematics, there are doubtless certain skills which the teacher must possess in order to effectively teach social studies. In mathematics, manipulatives were stressed for use in the classroom. Teachers must receive training in the use of manipulatives. Many college professors do not use or are not conversant with the use of manipulatives and therefore do not model their use. Consequently, they cannot teach these skills and may not adequately prepare future educators. Hence, changes must be made at each level in terms of curriculum and delivery thereof.

Do such standards constitute a national curriculum? Are they portends of a national curriculum? Do such standards constitute or promote equality? Of course, Mortimer Adler, in the *Paideia Program* (1984), argues for such a curriculum. Authors such as Faidley and Musser (1991) hold that the creation of national standards may be important elements in a process of change but should not be expected to solve the educational problems we seek to address (p. 27). Care must be taken such that standards are a means not an end in the educational process. State and national standards do seem to provide a foundation for reform however. These national efforts are paralleled by state legislation in states such as Connecticut, Kentucky and Arkansas (Act 236). In these states, the curricular frameworks desired for student learning may be delimited but the state standards do not equate to a state curriculum any more than national standards equate are a national curriculum. What is missing is the requirement that they be followed to the letter. There remains considerable discretion for teachers, academicians, and school boards in the selection of textual materials for student use. There is likewise considerable discretion in instructional practice left to teachers. Selective or interest based emphasis on curricular concepts taught by teachers coupled

with a lack of mandated assessment as it relates to these suggested standards negates their impact as a basis for a state or national curriculum. Although they may presage a national curriculum, there is no guarantee of equality or even similarity in the instruction to be provided and received in America's classroorns as a direct result of the national goals and/or of the standards developed so far.

In Great Britain, one of the countries studied by the National Assessment of Evaluation Progress (NAEP) Council, the situation differs from that in this country. The movement to a national curriculum in that country as been problematic due to a lack of vision as to what the curriculum should be. The national curriculum, adopted in 1988 by virtue of the Education Reform Act, is subject based and interestingly, does have attendant national benchmark assessments which are given to students on a regular basis (Lofty, 1990). In this country, the goals may ultimately provide the vision which must undergird a movement to a national curriculum. It is questionable as to whether either the national curriculum or the attendant assessment will become a reality, however.

The debate ensuing about the national social studies standards is but one indicator that the road to a national curriculum would be long and hard. The cognitive dissonance, which exists for us predicated on our tradition of educational decentralization, is exemplified in the Association for Supervision and Curriculum Development (ASCD) delegate assembly's reluctance to support either a national curriculum or national testing (Natale, 1991), in spite of ASCD's support for school reform.

In Britain, the national curriculum has resulted in a loss of local control of schools (Bell & Bowe, 1992). Most Americans would not tolerate such a loss of control. Eisner (1991) argues that national curriculum is not the issue, however. Eisner believes that the real problems of schools are not curriculum based. The challenge which must be addressed in American education, if Eisner is correct, is that of balancing the need for a national curriculum, which may naturally emanate from the national

standards, with accountability and the need to preserve local initiative and the democratic local control so basic to our educational tradition (Smith, O'Day & Cohen, 1991). The concern for preservation of local control encompasses within it concern for and recognition of the professional tasks which teachers must carry out as well the time and support required to produce real change in a system. Of course the voluntary nature of standards adoption, if in fact they are truly voluntary, may preclude the coherent, systemic improvement in educational quality and student achievement which is contemplated at the national and state levels and exemplified by both the national goals and the developing standards. Additionally, standards must reflect " high not minimal expectations" for all students (Smith, Fuhrman & O'Day, 1994). It remains to be seen whether or not the standards proposed and accepted in schools in this country will be rigorous and expressive of those high expectations.

O'Neill would argue that national standards must include content standards, student performance standards, and system performance standards (1993). However, to ensure that these standards are put into place and effectively implemented, teacher involvement may be necessary and extensive training for their implementation would be a prerequisite which must be attended to by states and school districts. Problematically, teacher involvement will create a tension within the process of schooling between school based assessment and centralized testing for accountability (Troman, 1989).

There are implications in this for higher education. These are that training must be available at colleges and universities for both preservice teachers and for practicing teachers who will require enhanced skills and knowledge bases in subject areas and effective teaching. (Darling-Hammond, 1990). Even the methods used to teach and to test potential educators must change if the methods of teaching and testing students are to change in schools. It is true that we tend to teach as we have been taught. College outcomes assessment and our methods of addressing learning concerns in higher

education may infact prove to be as important as those concerns which have been voiced about k-12 education since 1983.

National goal # 5 speaks to effectiveness in a global economy. The National Center for Educational Statistics is reviewing competencies of college graduates to ascertain whether or not this goal is being met. Parenthetically, one wonders if the implementation of the assessment relative to goal #5 and the knowledge bases of prospective educators, and of college students in general, might not lead to national licensure standards for educators and other professionals as well as national curriculum standards and assessment standards for higher education and k-12 education.

It is indeed an onerous task to validly and reliably measure that which we are doing in education. Absent a valid and reliable measurement, we will not have the data necessary to really guage what we are doing or what must be done to ensure improvement, a situation not unlike that in which we find ourselves today, knowing that something is wrong with the education of our youth, but not precisely what and certainly not how to remedy the problem(s) on a national level or a state level. Modest gains have been achieved at certain schools and districts where they are and can be tailored to specific students needs and predicated on close working and problem solving relationships in which teachers are invested.

While it is the hope of individuals associated with such entities as the National Council on Educational Standards and Testing that "standards shall provide focus and direction, not become a national curriculum" (Kean, 1992 p. 17), the currently developed standards do border on a national curriculum. Kean further notes that standards "must be national not federal" (p. 18). Indeed, they are national by virtue of the fact that they are predicated on a law. Whether or not they become federal will relate to any additional executive or legislative mandates from the federal level relative to what states must do in address to and implementation of the standards and assessment of them.

Assessment is an issue which has been the focus of those who have attempted to address national content standards since the 1989 Charlottesville Educational Summit between President Bush and the governors. Assessment has taken on added impact, however, since the creation of the National Education Goals panel which has a monitoring role. It was the passage of Goals 2000 under the Clinton administration, however, which provided the legal structure for the national standards and which created a national education standards and improvement council to "certify national content and performance" (Mussell & Kirst,1994, p. 108). This council is designed to formalize the assessment component of Goals 2000. This makes assessment an integral part of the process and expands the debate relative to how one assess these goals and their outcomes and the attendant standards with or without a national curriculum.

It is important to note that national assessment doubtless will be primarily summative not formative in nature. It is summative evaluation which incorporates research control and generalizability (Borg & Gall,1983). Summative evaluation is used to judge the effectiveness of a student's learning, whereas formative assessment is used to determine how well students have mastered specific elements of the curricular program. Formative assessment must take place at frequent intervals. Summative evaluation occurs at the end of a unit or a year or at least at infrequent enough intervals as to be too late to really change or modify the learning process for individual students. The farther the assessor is from the student, the more likely that evaluation will be summative. Though we may know the direction in which our improvement efforts are to go by virtue of national standards, we may not succeed in reaching our goals absent methods of formative assessment.

In a sense, national assessments can tell us more precisely what the implications of the national standards may be (Wool & Power, 1984). National assessments may define more closely whether standards are prescriptive or mere expectations and may delimit the benchmarks for student achievement and programmatic outcomes expected as

a direct result of the goals and standards. Assessment of standards could demand, if they are prescriptive, a baseline against which to measure progress and/or change. Thought must be given to whether the standard itself is the instrument or measure, or a sort of normative proposal which may change in the future relative to what should be taught rather than "what is being taught" (Wirtz & LaPointe, 1982, p.28).

Finally, the questions must be asked, how does one measure against standards if they are transient in nature? and are we testing to maintain or to raise standards? The NAEP is part of the national assessment system which is evolving in the U.S. as a direct result of the national goals. Directions recommended for the NAEP as "a rigorous measure of educational attainment in the essential subject matters" (NAEP, 1992) include:

1. Alignment of NAEP frameworks and test objectives to national content standards;
2. Reporting of results at state and national levels;
3. Assessment in a three year cycle.

The NAEP contemplates that such assessment will be designed by classroom teachers, however. This again speaks to the need for changes in higher education and in the professional development of teachers. It also speaks to the fact that individual concerns may enter into the development of assessment instruments, a factor which may blunt or defeat the purpose of national standards and assessment but which will not negatively impact the tradition of local educational control. To date, assessment (NAEP) has been primarily in the form of multiple choice testing. As assessment practice changes, the movement to performance based assessment in national content standards will demand greater communication with schools, teachers and the public. A definition of performance based tasks, the establishment of criteria for performance tasks, and the establishment of adequate time and training for teachers (Guskey, 1994) are also necessary components of assessment. School research completed as recently as 1993

(Vitali in Guskey) indicates that although teachers like performance based assessments better than multiple choice tests, those same teachers do not value performance based assessments enough to change instructional practices to incorporate performance based assessment. Very simply, evaluation of performance based instruction and outcomes requires expertise which most teachers and educational stakeholders do not possess.

Already we in higher education are faced with new NCATE accreditation standards for teacher preparation programs. Additionally, North Central has called for multiple assessment practices to be implemented in all academic areas on college campuses. Higher education is being expected to become more of a player in school reform after the Break the Mold model of John Goodlad (Wise, 1994).

States like Arkansas (Act 236) and Kentucky with its Educational Professional Standards Board have already begun to identify performance standards and certification issues. NCATE has established a standards committee for ensuring best practice in higher education (Hall, 1993) which focus on systemic reform, curriculum goals and new assessment forms " including developing, identifying, or evaluating new assessments, including performance based and portfolio assessments" (Wise, 1994, p. 2).

In Japan, France, West Germany, and Britain as well as several European Community Schools, national testing is limited to a relatively small group of students and is primarily multiple choice and essay in nature. These tests are used not to ascertain whether or not national goals or standards are met so much as to weed out students who will not go on to higher education. These are primarily measures of knowledge, whereas performance based assessment may be more nearly predicated on an assessment of the use of gained knowledge (National Endowment for the Humanities, 1991). Higher education may be vital in the facilitation of educational reform (Wagner, 1993) and in the evaluation of appropriate assessment formats and instruments.

Higher education in partnership with k-12 education surely will and must play a vital role in the determination of answers to the many questions which are extant with regard to the national goals, the so-called national curriculum standards, the probability of national assessment and the possibilities of what that assessment may be. The contents of the standards are not resolved. The issues attendant upon assessment are not defined nor are the questions about such assessment, what it will measure and how, adequately addressed. The national debate continues. One thing is certain however. Higher education and k-12 education will be significantly impacted by the fallout from the national goals and must change significantly by the year 2000 not only to address the needs of our clients, students and society, but also to avoid the potential movement from national goals to federal regulation of education in the United States in the 21st century.

References

Adler, M. J. (1984). The paideia program. New York: Macmillan Publishing Co.

Borg, W. & Gall, M. (1983). Educational Research (4th ed.) New York: Longman.

Bull, S.J. & Bowe, R. (1992). Subject departments and the "implementation" or national curriculum policy: an overview of the issues. Journal of Curriculum Studies, 24, (2).

Clinchy, E. (1994). Higher education: The albatross around the neck of our public schools. Kappan, 75, (10). June, 1994.

Corrullo, S. (1993). National assessment of college students learning: a status report. USDOE.

Darling-Hammond, L. (1990). Achieving our goals: superficial or structural reforms? Kappan.

Davies, D. (1994). Partnerships for reform. Education Week, XIV (6). October12, 1994.

Eisner, E.W. (1991). Should america have a national curriculum? Educational Leadership, 49, (2). February,1991.

Faidley, R. & Musser, S. (1991). National education standards: The complex challenge for educational leaders. Bulletin, 75, (537). October, 1991.

Goodlad, J. I. (1990). Teachers for our nation's schools. San Francisco, CA: Jossey-Bass Publishers.

Guskey, T.R. (1994). What you assess may not be what you get. Educational Leadership, 51, (6). May, 1994.

Hall, G. (1993). Field reviews accreditation standards. NCATE Quarterly Teaching, 3, (1).

Hirsch, E.D. (1987). Cultural literacy. New York: Houghton Mifflin Co.

Kean, M.H. (1992). Targeting education and assessing the schools the schools: a consideration of national standards. Bulletin.

Lofty, J.S. (1990). Coming home to the national curriculum. English Education. December, 1990.

Massell, D. (1994). Three challenges for national content standards. Education and Urban Society, 26, (2). February, 1994.

Massell, D. (1994). Determining national content standards. Educationa dn Urban Society, 26. (2). February, 1994.

Natale, J. (1991). ASCD pushes school reform but balks at national testing. The Executive Educator. July, 1991.

National Endowment for the Humanities. (1991). Educational tests: What other countries expect their students to know. Washington, D.C.: National Endowment for the Humanities.

National Educational Goals Panel. (1992). Gauging high performance.

Neill, M. (1991). Why the united states doe not need a national test: Testimony to the house subcommittee on select education. Cambridge, MA: National Center for Fair and Open Testing.

O'Neal, J. (1993). National standards make a difference? Educational Leadership, 50l, (5)., February, 1993.

Paulu, N. (1988). Experiences in school improvement: The story of 16 american districts. Washington, D.C.: USDOE.

Porter, A.C. (1990). Assessing national goals: Some measurement dilemmas. New York: Educational Testing Service.

Ravitch, D. (1983). The troubled crusade. New York: Basic Books, Inc.

Ravitch, D. (1992). National standards and curricular reform: A view from the department of education. Bulletin, 76, (548). December, 1992.

Smith, M.S., O'Day, J.A. & Cohen, D.K. (1991). A national curriculuIm in the united states? Educational Leadership. 49. (1).

Smith, M.S., Fuhrman, S.H. & O'Day, J.A. (1994). National curriculum standards: are they desireable and feasible? The Governance of Curriculum. Alexamdria, VA: ASCD.

Sykes, G. (1989). National certification for teachers: a dialogue. National Education Association. January, 1989.

USDOE. (1987). What works: Research about teaching and learning. (2nd. ed.). Washington, D.C.

USDOE. (1987). James Madison High School. Washington, D.C.

Wagner, E.D. (1993). New directions for american education: Implications for continuing educators. Boulder, CO: Western Interstate Commission for Higher Education.

Wirtz, W. & LePointe, A.E. (1982). Measuring the quality of education: a report on assessing educational progress. Washington D.C.: Wirtz & LaPointe.

Wise, A. E. (1994). Professionalism and standards: a unified system of quality assurance. Education Week. June, 1994.

Wise, A.E. (1994). New national institutes of education. NCATE Quarterly Teaching.

Wood, R. & Power, C. (1984). Have national assessments made us any wiser about "standards"? Comparative Education, 20. (3)