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What's Next: A New Knowledge Era for School Improvement

NEKIA's Recommendations for the Reauthorization of the Elementary and Secondary Education Act

The National Education Knowledge Industry Association (NEKIA) is pleased to present the following recommendations for the reauthorization of the Elementary and Secondary Education Act (ESEA). NEKIA is a non-profit, non-partisan association dedicated to expanding the use of research-based knowledge in policy and practice in pre-K-12 education. Our members represent a community of successful education organizations and agencies established to support high-quality education research, development, dissemination, technical assistance and evaluation at the federal, regional, state, tribal, and local levels.

We believe that the effective use of research-based knowledge is essential to improving pre-K-12 education and should be a central organizing concept for the reauthorization of ESEA. By the term "effective use of research-based knowledge" we mean an approach to school improvement in which key stakeholders create, translate and apply the best available, empirical evidence for improving student achievement. We envision a new knowledge era in national education policy that focuses on the effective use of research-based knowledge to achieve successful and sustainable school improvement.

Recommendations

#1 Make the effective use of research-based knowledge a central theme of the reauthorization --- We believe the reauthorization offers an opportunity to take the next logical step in the standards based reform movement by clearly and explicitly focusing on the effective use of research-based knowledge in school improvement. We suggest that the title of the new law should reflect this theme, for example, "Improving America's Schools with Research-based Knowledge Act"

#2 Incorporate the concept of knowledge use in scientifically based research provisions --- We recognize the value and importance of the scientifically based research (SBR) provisions in the current statute. These provisions should be strengthened in the reauthorization by emphasizing the creation, application, *and use* of research-based knowledge in addressing practical problems. We aim to ensure that educators are able to use scientifically based research to improve student achievement. We suggest incorporating utilization language into the SBR definition and adding a new definition for the effective use of research-based knowledge to the underlying statute.

Knowledge-Use = Results

Providing educators with usable, sound research-based practice arms them with the knowledge they need to dramatically raise student achievement.

Adopting NEKIA's recommendations will greatly assist educators in their goal to prepare students to succeed in the workplace and postsecondary education.

#3 Launch a national initiative for using research-based knowledge for school improvement --- Similar to other efforts that have deserved focused, high-priority attention, we recommend that the Department of Education be authorized to launch a national school improvement initiative that enables the effective use of research-based knowledge at the federal, state, tribal, and local levels. The basic components of this initiative include:

- ***School Improvement Venture Fund for Using Research-based Knowledge*** to support local and state efforts to build capacity for effective use of research-based knowledge. Allowable activities include: creating a corps of local chief knowledge officers and research-to-practice coordinators; creating professional development programs and institutes on the use of research-based knowledge; conducting research on effective knowledge use; identifying and disseminating promising practices; promoting entrepreneurship in developing new knowledge-based solutions and choices in schools; establishing fellowship programs for building expert capacity in the use of research-based knowledge.
- ***Office of Knowledge Use in Policy and Practice*** at the U.S. Department of Education to promote and coordinate throughout the agency the development of policies and programs for the effective use of research-based knowledge.
- ***Interagency Task Force*** to promote coordination and cooperation among Federal departments and agencies administering knowledge use programs and activities in education.
- ***National Partnership Network for Knowledge Use in Education*** to promote and advance the use of research-based knowledge in conjunction with private and public organizations and entities throughout the country.
- ***Biennial Report to Congress*** to assess the state of knowledge use in education in shaping policy and practice nationwide.

#4 Boost investments in research, development and knowledge use in pr-k-12 in line with the increasing demand for school improvement --- We believe that the reauthorization of ESEA should have strong policy links to the Education Sciences Reform Act (ESRA) by aligning the quality and quantity of basic and applied research, development, dissemination, and technical assistance authorized under ESRA with the increased demand for school improvement created under ESEA. Specifically we recommend at least a doubling of the authorization levels of knowledge use programs in ESRA including:

- Comprehensive Assistance Centers
- National Research and Development Centers
- Regional Educational Laboratories
- Research, Development, and Dissemination fund
- Special Education Research and Evaluation programs
- Statewide Longitudinal Data Systems

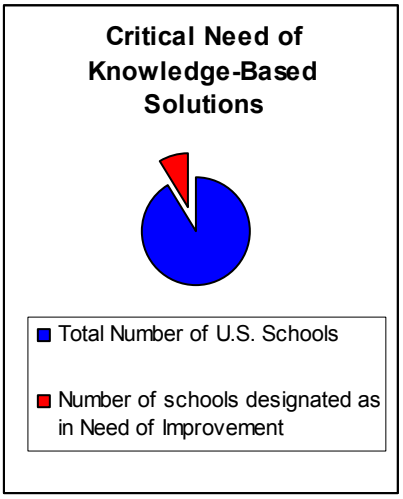
#5 Increase support for existing programs that promote the importance of the effective use of research-based knowledge in school improvement. A number of existing ESEA programs can and should contribute to the development of a knowledge use infrastructure in pre-k-12 education. We recommend increasing the authorized funding levels for these programs including: Comprehensive School Reform; Title I School Improvement Fund; Teacher Quality State Grants; Smaller Learning

Communities; Twenty-first Century Learning Centers; Even Start; Math Science Partnerships; Parent Information Resource Centers; Reading First; Striving Readers; Technology State Grants; Title V State Innovation Grants.

Why the Effective Use of Research-based Knowledge is Critical to School Improvement

The concept of developing research-based solutions to the problems of low student achievement is a cornerstone of the No Child Left Behind Act (NCLB). We believe that the next reauthorization of the ESEA should focus on creating, translating, and applying research-based knowledge into useful tools that will improve classroom policies and practice in low-performing schools for the following critical reasons:

Increasing demand for knowledge-based solutions--- In 2005, more than 24,000 U.S. public schools were not making adequate yearly progress and over 10,000 schools were designated in need of improvement under the NCLB. Many more schools are on the "cusp" and in need of additional support. To fulfill the promise of NCLB, much greater attention needs to be directed to delivering research-based solutions to these schools in need.



Inadequate federal investment in R&D --- While the NCLB requires educators to use instructional practices and innovations supported by research, the Department of Education spends less than one percent of its budget on research, development, and statistics. This level of investment will not build the evidence base needed by educators to achieve the improvements envisioned by NCLB. By comparison, other agency R&D budgets as a percentage of their discretionary spending are: Defense, 17%; NASA, 68%; Energy, 37%; HHS, 42%; NSF, 74 %; and Agriculture, 4.6%.

The Department of Education's research budget has been and remains among the smallest of any cabinet-level agency. Without an increased investment in developing and testing research-based practices, schools and districts will continue to find it difficult to fulfill NCLB's mandate for using such practices.

An escalating capacity crisis --- A report by the non-partisan Center on Education Policy (CEP) released in 2006, finds that there is a growing capacity crisis at the state and local levels to support schools in need of improvement. We agree with CEP's assessment that "…the Department and the Congress should (provide) more funding and … other types of support to help strengthen states' and districts' capacity to assist schools identified for improvement. Many states and districts lack sufficient funds, staff, or expertise to help improve all identified schools…" A national study by the Center for Research on Education Outcomes further found that this crisis is also

exacerbated by state education agencies' very low capacity to evaluate the education programs that are carried out at the state and district levels.

A weak policy link between the federal research enterprise and federal school improvement efforts --- On the one hand, NCLB stimulates and shapes greater demand for research-based knowledge solutions through its accountability and sanctioning provisions. On the other hand, ESRA aims to increase the supply of research-based knowledge through its investments in research and development. While there are numerous provisions in NCLB regarding scientifically based research and in ESRA for addressing school improvement, the links between supply and demand have not been fully developed and remain functionally weak. We attribute part of the problem to federal policy that fails to create a strong systematic link between ESRA and NCLB focusing on the critical areas of knowledge development, transfer, application and use in school improvement.

Urgent need to take the next essential step in standards-based reform --- Federal education policy has evolved in phases over the past 15 years in concert with the implementation of the elements of standards-based reform. The focus on standards and assessments in the late 1980's and early 1990's spawned major attention on the alignment of standards, curriculum, and assessments in the 1990's which has led in part to the current emphasis on accountability. It is particularly significant that the last three reauthorizations have paralleled this progression with the Hawkins/Stafford Elementary and Secondary School Improvement Amendments of 1988, the Improving America's Schools Act of 1994, and the NCLB of 2002. The next logical step in this standards-based continuum is a more comprehensive and vigorous focus on school improvement --- providing significant new resources and expertise targeted both to turning around low performing schools and to building a knowledge-based capacity and infrastructure for sustained improvement. The reauthorization should serve as a major catalyst for moving to this next critical phase.

Proposed Bill Language

Modifications to current Scientifically Based Research definition (see recommendation #2)
(NEW LANGUAGE IN BOLD):
Title IX General Provisions
Part A--Definitions
Sec 9101Definitions
(37) SCIENTIFICALLY-BASED RESEARCH. The term scientifically based research-
(A) Means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable, valid and **USEABLE** knowledge relevant to education activities and programs; and
(B) Includes research that-
(i) employs systematic, empirical methods that draw on observation or experiment;
(ii) Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;

(iii) Relies on measurements or observational methods that provide reliable, valid and **USEABLE** data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;

(iv) Is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the conditions of interest, with preference for random-assignment experiments or other designs to the extent that those designs contain within-condition or across-condition controls;

(v) ensures that experimental studies are presented in sufficient detail and clarity to allow for replication, **THE EFFECTIVE UTILIZATION OF THE KNOWLEDGE**, or, at a minimum, offer the opportunity to build systematically on their findings; and

(vi) has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective and scientific review.

Use of Research-based Knowledge Definition (see recommendation #2)

(1) Use of Research-based Knowledge - The term `the effective use of research-based knowledge --

(A) refers to an approach to school improvement in which key stakeholders create, translate and apply the best available, empirical evidence for improving student achievement.

(B) involves the interactive processes including research, development, dissemination, technical assistance, and evaluation in which research-based knowledge is applied to improving instructional practice and shaping educational policy; and

(C) includes such activities essential to school improvement as—

(i) Rigorous scientifically based research on questions and issues relevant to school improvement

(ii) Development and evaluation of practical applications of research, such as procedures, policies, practices, programs, materials, and training;

(iii) The use of research-based technical assistance and professional development for policymakers, practitioners, and other stakeholders;

(iv) Collection and dissemination of information, data, and statistics;

(v) Initiatives for building linkages among research, policy, and practice; and

(vi) An infrastructure for increasing capacity for the use of research and its applications.

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National Knowledge Use Initiative (see recommendation #3)

SECTION 1. SHORT TITLE. This Act may be cited as the Using Research-based Knowledge for Innovation and Improvement for All Children Act"

SEC. 2. FINDINGS.

The Congress finds as follows:

(1) The effective use of research-based knowledge allows information generated by scientifically valid research to be available to, and usable by, educators in the classroom.

(2) The limited use of research-based knowledge has impeded the progress of schools in increasing academic achievement of students.
(3) Research shows that student achievement increases when education practices based on scientifically valid research are used by classroom teachers.
(6) The active involvement of teachers, principals, district administrators, chief State school officers, as well as developers, researchers and intermediaries is essential to the effective use of research-based knowledge to policy and practice.
(6) Although the No Child Left Behind Act of 2001 (which amended the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6301 et seq.)) requires educators to use instructional practices and innovations supported by scientifically valid research, such practices and innovations are in short supply and not widely available and coordinated for effective use in classrooms.
(7) Given that a significant percentage of public schools in the United States are not making adequate yearly progress under the No Child Left Behind Act of 2001, steps must be taken to coordinate the effective use of research-based knowledge by classroom educators.
(8) Particular subgroups of students are not making adequate yearly progress, as defined by the No Child Left Behind Act of 2001, including economically disadvantaged students, students from major racial and ethnic groups, students with disabilities, and students with limited English proficiency. Such students require targeted efforts to ensure that they are receiving instruction supported by scientifically valid research.
(9) More instructional activities and practices supported by research-based knowledge need to be developed to meet the current and expected demands of educators in schools.
(10) Although a number of federal research, development, dissemination, and technical assistance programs have been proven to be effective, these programs need to be brought to national scale and coordinated through a national, knowledge use initiative.
(11) The effective use of research-based knowledge in education brings together the professional wisdom of practitioners and the best available empirical evidence generated through scientifically valid research.
(12) Too often exemplary innovations in teaching, curriculum, and assessment are demonstrated to be effective, but have minimal impact because they are not brought to scale.
(13) Educational practices that are supported by scientifically valid research need to be brought to greater scale in school districts across the country in order to have broad influence on student achievement.
(14) National leadership is needed to provide targeted initiatives, collaboration, and coordination of knowledge use programs to ensure that classroom educators have access to, and utilize practices supported by, scientifically valid research.

(15) A national leadership initiative to coordinate Department of Education programs and promote the use of research-based knowledge in education will facilitate the effective implementation of the No Child Left Behind Act of 2001.

SEC. 3. NATIONAL LEADERSHIP INITIATIVE FOR EFFECTIVE KNOWLEDGE USE IN EDUCATION.

(a) Establishment- There shall be in the Department of Education the National Leadership Initiative for the Use of Research-based Knowledge in Education (in this section referred to as the "Initiative").

(b) Goals- The goals of the initiative shall include the following:

(1) Promoting the use of scientifically valid research in education practice and innovation.

(2) Providing leadership to the Nation in developing and promoting policies, practices, and investments that result in the provision of instruction supported by scientifically valid research to elementary and secondary school students.

(3) Developing and promoting policies, practices, and investments that result in bringing to scale successful educational practices that are based on scientifically valid research.

(4) Informing the public about the significance of using scientifically valid research in education.

(5) Encouraging the use of new technologies in appropriate knowledge use efforts.

(6) Supporting the effective coordination of current federally supported knowledge use programs, including regional educational laboratories, research and development centers, technical assistance centers and consortia, national clearinghouses, and other entities involved in research, development, dissemination, technical assistance, and evaluation.

(7) Administering the partnership that may be established pursuant to subsection (c) (2) of this section.

(8) Producing the biennial report required by subsection (d).

(9) Using the expertise of existing knowledge use programs to assist in the implementation of this section.

(c) Allowable Activities – the initiative may conduct one or more of the following activities:

(1)Interagency Task Force-

(A) Establishment- To promote coordination and cooperation among Federal departments and agencies administering knowledge use programs and activities, the Secretary may convene the Interagency Task Force on Knowledge Use in Education (in this subsection referred to as the `Task Force').

(B) Functions of the task force-

(i) Identify and review Federal programs, activities, and projects with respect to knowledge use in education (including any plans for such programs, activities, and projects); and

(i) Prepare, for inclusion in the biennial report under subsection (d), recommendations on ways to improve the coordination and collaboration of such programs, activities, and projects.

(C) Membership- The Task Force may include, but is not limited to, the following members:

(i) The Director of the Institute of Education Sciences.

(ii) The Director of the National Institute of Child Health and Human Development.

(iii) The Director of the National Science Foundation.

(iv) Such Assistant Secretaries and other officials from the Department of Education as the Secretary may designate.

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(2) National Partnership Network for Knowledge Use in Education-

(A) Establishment- The Secretary may establish a network of private and public entities throughout the Nation, to be known as the National Partnership Network for Knowledge Use in Education (in this subsection referred to as the `Partnership').

(B) Purpose- The purpose of the Partnership is to promote and advance knowledge utilization in education in conjunction with private and public organizations and entities throughout the Nation.

(C) Functions- The Partnership may--

(i) encourage private-public venture partnerships for knowledge utilization;

(ii) Identify needs in relation to knowledge use programs, activities, and projects supported by the Federal Government;

(iii) Provide general advice to the Secretary; and

(iv) Provide technical assistance to the elementary and secondary education community to encourage the adoption of education practices supported by scientifically valid research.

(3) Advisory panel-

(A) Establishment- The Secretary may establish a Partnership Advisory Panel (in this paragraph referred to as the `Panel').

(B) Membership- The Secretary shall select the members of the Panel from among individuals who represent entities participating in the Partnership and have expertise in knowledge use.

(C) The Panel may conduct the following functions:

(i) To advise the Secretary regarding the opportunities and challenges of promoting knowledge use activities at the local, State, and Federal levels through the Partnership; and offer suggestions to the Secretary for promoting knowledge use policies and strategies in the future through the Partnership.

(4) Office of Knowledge Use in Policy and Practice

(A) The Secretary may establish an Office of Knowledge Use in Policy and Practice administered by the Director of the National Initiative for Effective Knowledge Use

(B)The Office may conduct the following functions:

(1) Promote the utilization of scientifically valid research in education practice and innovation, provide leadership to the Nation in developing and promoting policies, practices and investments that result in the provision of instruction to K-12 students that is supported by scientifically valid research

(2) Develop and promote policies, practices and investments that result in bringing to scale successful educational practices that are based on scientifically valid research.

(3) Inform the public regarding the significance of utilizing scientifically valid research in education.

(4) Encourage the use of new technologies in appropriate knowledge utilization efforts

(5) Support the effective coordination of current federally supported knowledge utilization programs including the regional educational laboratories, the university-based research and development centers, comprehensive assistance centers, national clearinghouses, and other entities involved in research, development, dissemination, technical assistance and evaluation.

(6) Administer the Interagency Task Force in section TBA

(7) Administer the Panel in section TBA

(8) Produce the Biennial Report in section TBA

(9) Use the expertise of existing knowledge use programs in (5) to help implement the components of this initiative.

(C) The Director shall be an expert in knowledge utilization including promoting the effective implementation of the results of research in the classroom, and managing large institutions or consortia that conduct a broad array of research applications.

(D)The Director is authorized to select, appoint, and employ such officers and employees as may be necessary to carry out the functions of the Office, subject to the provisions of Title 5, United States Code (governing appointments in the competitive service), and the provisions of chapter 51 and subchapter III of chapter 53 of such title (relating to classification and General Schedule pay rates).

(d) Biennial Report-

(1) In general- The Secretary shall--

(A) Conduct a biennial analysis of the state of knowledge use in education practice and innovation; and

(B) Submit a report on the results of each such analysis to the Committee on Education and the Workforce of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate.

(2) Contents- Each report submitted under this subsection shall--

(A) Include an assessment of efforts to increase the use of education practices supported by scientifically valid research; and

(B) Recommend changes in policies to further promote progress in knowledge use.

(3) Initial report- The first report under this subsection shall be submitted no later than 2 years after the date of the enactment of this Act.

SEC. 4. SCHOOL IMPROVEMENT VENTURE FUND FOR USING RESEARCH-BASED KNOWLEDGE (a) Program Authorized- The Secretary of Education shall make competitive grants to, and enter into contracts with, eligible entities to support projects that build local and state capacity for the effective use of research-based knowledge for school improvement.

(b) Use of Funds- the Secretary may not make a grant to an eligible entity under this section unless the entity agrees to use the grant for 1 or more of the following:

(1) Helping educators become more informed consumers of research-based programs and services through sustained professional development activities, including annual conferences, summer teacher academies, on-line seminars, and school-based workshops.

(2) Creating incentives for States and districts to expand and coordinate their investments in initiatives focusing on the use of research-based knowledge.

(3) Focusing special knowledge use efforts on high-need, low-capacity areas such as rural schools.

(4) Developing a national corps of regionally based research-to-practice coordinators to work in schools on the effective implementation, use, and dissemination of education practices supported by scientifically valid research.

(5) Targeting efforts to classroom educators working with subgroups whose test scores indicate that they need improvement under the adequate yearly progress calculation required by section 1111(b) (2) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6311(b) (2)), including economically disadvantaged students, students from major racial and ethnic groups, students with disabilities, and students with limited English proficiency.

(6) Conducting research on effective use of research-based knowledge in turning around low performing schools.

(7) Coordinating and enhancing existing federally supported knowledge use programs, including regional educational laboratories, research and development centers, technical assistance centers and consortia, national

clearinghouses, and other entities involved in research, development, dissemination, technical assistance, and evaluation.

(8) Supporting efforts to identify and disseminate promising practices in the implementation of education innovation that are supported by scientifically valid research.

(9) Promoting entrepreneurship in developing new solutions, innovations, and choices in education for consumers that are supported by scientifically valid research.

(10) Establishing fellowship programs to encourage expert capacity in the use of research-based knowledge.

(11) Using Internet-based technology to enable classroom teachers to access, in all content areas, instructional practice and innovation that are grounded in scientifically valid research.

(12) Developing means and methods for applying and using relevant information in the What Works Clearinghouse and other clearinghouses available to, and accessible by, classroom teachers.

(13) Developing strategies to support the use of scientifically valid research by classroom teachers and school administrators in managing and improving student behavior and school climate.

(c) Applications- To seek a grant or a contract under this section, an eligible entity shall submit an application to the Secretary at such time and in such manner as the Secretary may reasonably require.

(d) Eligible Entities- In this section, the term `eligible entity'--

(1) means a private or public, for-profit or nonprofit organization, institution, agency, institution of higher education, or partnership of such entities, that has demonstrated expertise in knowledge utilization in education; and

(2) includes existing federally supported knowledge use programs, such as regional educational laboratories, research and development centers, technical assistance centers and consortia, national clearinghouses, and other entities involved in research, development, dissemination, technical assistance, and evaluation.

SEC. 5. DEFINITIONS.

In this Act:

(1) Applied research- The term `applied research' has the meaning given to that term in section 102 of the Education Sciences Reform Act of 2002 (20 U.S.C. 9501).

(2)Knowledge use- The term `the effective use of research-based knowledge '--

(A) refers to an approach to school improvement improvement in which key stakeholders create, translate and apply the best available, empirical evidence for improving student achievement.

(B) involves the interactive processes including research, development, dissemination, technical assistance, and evaluation in which research-based knowledge is applied to improving instructional practice and shaping educational policy; and

(C) includes such activities essential to school improvement as—

(i) Rigorous scientifically based research on questions and issues relevant to school improvement

(ii) Development and evaluation of practical applications of research, such as procedures, policies, practices, programs, materials, and training;

(iii) The use of research-based technical assistance and professional development for policymakers, practitioners, and other stakeholders;

(iv) Collection and dissemination of information, data, and statistics;

(v) Initiatives for building linkages among research, policy, and practice; and

(vi) An infrastructure for increasing capacity for the use of research and its applications.

(3) Initiative- The term `Initiative' means the National Leadership Initiative for Knowledge Use in Education established by section 3.

(4) Scientifically valid research- The term `scientifically valid research' has the meaning given to that term in section 102 of the Education Sciences Reform Act of 2002 (20 U.S.C. 9501).

(5) Secretary- The term `Secretary' means the Secretary of Education.

SEC. 6. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated such sums as may be necessary to carry out this Act for each of fiscal years 2008 through 2012.