A review of current literature identifies three growing trends. First, there has been an increase in legislatively mandated accountability that requires taxpayer-funded education and research programs be demonstrated effective by "scientifically based research." To receive federal monies programs must emphasize quantitative, evidence-based research as defined by legislation such as the Reading Excellence Act of 2000 and the No Child Left Behind Act of 2002. Second, there has been an increase in the use of distance education technologies to deliver private and taxpayer-funded adult literacy instruction (especially for the General Educational Development Tests [GED]). Third, K-12 standards and career paths have increasingly been linked to adult literacy instruction. Programs must provide documented results of adult learner achievement of academic skills that transition to further education and/or careers. Debate in the field has focused upon whether the goals of adult literacy are similar enough to the goals of secondary education to require that both be held to the same standards. Little quantitative research has been undertaken in adult literacy, so principles, trends, ideas, and comments have been collected and disseminated to share the research information available, put in place a mechanism to judge that information, and point out areas that require more research. (Contains 23 references.) (MO)
Trends Influencing Adult Literacy Instruction and Research in 2003

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Adult literacy educators and researchers are beginning to see and feel the influence of three growing trends. These trends are:

1) In the United States and several other nations there is a legislation trend for increased program accountability and linking taxpayer funding of education and research to "scientifically based research;"

2) Increasingly both state and privately provided adult literacy instruction (especially for the GED) is being delivered through distance education; and

3) Increasingly, adult literacy instruction is being linked to state K-12 performance standards, career paths and education offered by community colleges.

Adult Literacy and Scientifically Based Reading Research

The term "scientifically based reading research" first made its appearance in legislation in 2000 as part of the Reading Excellence Act. The language of that legislation has since been picked up and extended in the 2002 No Child Left Behind Act and the U.S. Department of Education Strategic Plan for 2002-2007. Basically, the gist of these pieces of legislation and the strategic plan is to require programs and states seeking federal funding to demonstrate that instruction is clearly linked to strategies demonstrated to be effective by "scientifically based research" and further that the vast majority of research to be funded with taxpayer money is to meet the tenets of "scientifically based research."

The Reading Excellence Act Webpage indicates that the legislation authorizes the U.S. Department of Education to improve literacy in several areas and that it "base instruction, including tutoring, on scientifically-based reading research." (http://www.ed.gov/offices/OESE/REA/overview.html). Under Title VIII, Section 2252, Definitions of the Reading Excellence Act, criteria of Reading and Scientifically Based Reading Research are provided. They are:

Title VIII, Section 2252, Definitions -- Reading Excellence Act

Reading
The term 'reading' means a complex system of deriving meaning from print that requires all of the following:

a. The skills and knowledge to understand how phonemes, or speech sounds, are connected to print.
b. The ability to decode unfamiliar words.
c. The ability to read fluently.
d. Sufficient background information and vocabulary to foster reading comprehension.
e. The development of appropriate active strategies to construct meaning from print.
f. The development and maintenance of a motivation to read.

1 Portions of this section of the paper were developed for the NCSALL Annual Review for 2003
Scientifically Based Reading Research
The term 'scientifically based reading research' means the application of rigorous, systematic, and objective procedures to obtain valid knowledge relevant to reading development, reading instruction, and reading difficulties; and shall include 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 valid data across evaluators and observers and across multiple measurements and observations; and

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

Grover "Russ" Whitehurst, assistant secretary of the U.S. Department of Education’s Office of Educational Research and Improvement, has spoken in support of the federal move toward using "scientifically-based research" in education. Whitehurst indicates:

"Something needs to be done differently in education, and if it's based on science it's more likely to be cumulative and produce serious change. We want to see objective research in education that's as rigorous as topics in health and medicine."

He goes on to state:

We would like to see less of the type of research that is advocacy research, where the answer is determined before the research is conducted (Murray, 2002, p. 53).

Funding and Scientifically Based Research: Definitions of scientifically-based research have been embedded into federal legislation and specifications for what sorts of research, programs, services and materials may be funded with federal monies. Essentially, the same definition used in the Reading Excellence Act of 2000 (see above) was incorporated into the No Child Left Behind Act of 2002. In fact, use of scientifically-based research is highlighted as a major purpose of this legislation as articulated in purpose "(9) promoting school-wide reform and ensuring access of children to effective scientifically based strategies and challenging academic content. (U.S. Dept. of Education, Public Law 107-110, January, 2002, p. 16). The term "scientifically-based" research appears over 100 times throughout the legislation in relation to nearly every provision of the law. A typical example is the provision for professional development in reading instruction that specifies professional development "shall include information on instructional materials, programs, strategies and approaches based on scientifically based reading research (U.S. Dept. of Ed., Public Law 107-110, January, 2002, p. 127). Similar requirements are specified for materials and training provided to tutors, parents, and those participating in family literacy programs.

The U. S. Department of Education's Strategic Plan for 2002-2007 also highlights scientifically based research in Strategic Goal Four: Transform Education into an Evidence-based Field (U.S. Dept. of Education, Strategic Plan 2002-2007, 2002, 58-63). Performance targets are set for research funded by the U.S. Department of Education. For example, by 2004, 95% of all funded research must be "deemed of high quality by an independent review panel of qualified scientists (p. 61)." These scientists are not to be the same as the peer review panel and the performance target is to include "all research and evaluation studies initiated by any office within the Department, but would exclude collections of statistics (p. 61)." To make intentions perfectly clear, the plan goes on to specify that by 2004, 75% of funded projects that address causal questions will employ randomized experimental designs.
The strategic plan goes on to set up parallel performance targets for the dissemination and use of information from scientifically based research studies. For example, the plan specifies that the U.S. Department of Education "will create and maintain an online database of quality research on topics relevant to educational practice" and "will create and distribute user-friendly syntheses of quality research that bear on significant problems in educational practice (p. 62)." In addition the Department charges itself with creating a variety of guides "on how to engage in evidence-based education (p. 62)."

Much of the funding for adult literacy programs comes from federal monies passed through the states. In 1999 the federal government allocated $1.1 billion to state and local agencies for adult basic education service delivery. To receive funds, a minimum 25% state match is required. State matches ranged from 25% for Mississippi, Texas, and Tennessee to a 91% match for California with most states contributing in the 30%-40% range (Alampresse, 2002). Receiving federal monies most often entails incorporating exact language from federal legislation into state guidelines and directives. The repeated use of the term "scientifically based research" in federal specifications has guaranteed that the concept will remain intact as monies move through state programs (See, for example, California No Child Left Behind program guidelines http://www.cde.ca.gov/board/). Adult educators seeking state or federal funding for family literacy programs are now required to indicate how scientifically-based research is being used for instruction and program development. Adult literacy researchers seeking federal research support will need to adjust study designs to address definitions of scientifically based research. Qualitative researchers will be competing for a vastly diminished allocation of funds for non-empirical research.

What This Means for Adult Literacy Research and Education: What scientifically based research means to the field of adult literacy will be considered in two ways. First, a sampling of the thoughts and opinions of adult educators will be drawn from a lengthy discussion of this topic that occurred on the National Literacy Advocacy listserv of the National Institute for Literacy. This will be followed by a review of efforts to determine evidence-based principles and practices for adult literacy instruction by a joint research group supported by the National Institute for Literacy and the National Center for the Study of Adult Learning and Literacy.

A Sampling of Thoughts and Opinions on Evidence-based Adult Literacy Practice and Policy:

During April and May of 2002, the topic of evidence-based research and practice in adult literacy was extensively discussed on the National Literacy Advocacy listserv of the National Institute for Literacy. The archives of this discussion can be found at: (http://www.nifl.gov/lincs/discussions/nifl-nla/nla.html).

During the April portion of the discussion, several concerns and hopes were articulated. Among these were concerns that only one sort of evidence (empirical, experimental evidence) would be classified as evidence-based research and that this move toward evidence-based research was highly political. The special democratic nature of adult education (i.e. the predominance of adult goals and not mandated reading skills goals measured with standardized tests) was mentioned as one way that adult literacy education differed from children's schooling. There were several calls for a more eclectic approach to definitions of evidence and for dialogues across research traditions that would allow for qualitative case studies to inform later control group studies. Demetrion (April 7, 2002) hoped "for a profound and balanced eclecticism where methodology is placed in its proper role in helping to shed light on the content of scholarship."

In early May, John Comings, Director of the National Center for the Study of Adult Learning and Literacy, reanimated the discussion by posting an essay expressing concern that the political nature of the term "evidence-based" not lead us away from considering its value. Comings went on to describe in some detail various stages of the research process during which
different sorts of evidence and research were needed as hypotheses were developed, tested, and refined (Comings, May 1, 2002). He observed that: 

"Evidence-based education will require support to research that is sufficient, in terms of funding and duration, and that encourages interaction and cooperation among researchers."

He suggested we needed to reach some form of consensus on the purposes of adult literacy and concluded:

"I feel we should accept evidence-based education (while defending it against inappropriate use as a political tool) and fight for a piece of the pie."

Coming's posting was praised for its thoughtfulness and openness to a broader definition of evidence and sensitivity to the complexities of the research process. It also sparked much more detailed and elaborate responses to what evidence-based research and practice mean for the field of adult literacy. It is useful to examine some of the points made during this ongoing discussion.

King (May 2, 2002) commented that: 

"The failure is not in trying to disregard scientific method, but rather in failing to distinguish the different forms of data, data collection, the import of the prior development of the scientists' questions on humans and their outcomes, and the ethical-political implications of the outcomes themselves, including the covert assumption that complete predictability is a goal."

King's critique went on to make several additional points about problems with positivism including its exclusion of the voices of adult learners and their goals in determining the effectiveness of programs. She concluded with skepticism about the openness to other voices by "those who are making decisions, especially where adult education is concerned" and worried that the available research will be converted to "mandated applications which must be applied thusly or else."

Hansen (May 2, 2002) responded from the perspective of a program provider who was skeptical about resources for and benefits of the detailed research program described by Comings. She asked:

"If the field can't get funding for a much needed accountability tool, whatever would lead any of us to believe that they'd fund such research and a national system connected to state professional development systems as you write here?"

and

"Who exactly is going to pay for this wonderful scientific experiment? Will the benefactors truly be the non-reading or low level literacy student? Or would it in the end benefit only the researchers and the program administrators tallying their numbers?"

Hansen concluded relating a personal experience of having to delay service and "hope" because resources weren't available. "Let's pursue establishing policy that will be funded to increase our outreach so more adults, who need help changing their reading capabilities, get that opportunity in the current generation."

Later postings from other program providers underscored concerns about funding and that the nature of scientific research could mean denial of services to adults placed in control groups. Grubb (May 2, 2002) expressed the suspicion that the whole endeavor "is merely another attempt to justify failure to provide our field with adequate funding."

Efforts of the NIFL/NCSALL Reading Research Working Group:

In 2001, the National Institute for Literacy and the National Center for the Study of Adult Learning and Literacy supported efforts to develop guidelines for evidence-based principles and
practices in adult literacy education. They did this by bringing together a panel of experts on adult literacy research and practice. The efforts of this panel, which was named as the Reading Research Working Group (RRWG), led to the publication of Research-Based Principles for Adult Basic Education Reading Instruction (Kruidenier, 2002) and the establishment of a NIFL web-site for evidence-based practices in adult literacy education which may be found at: http://www.nifl.gov/partnershipforreading/adult_reading/adult_reading.html.

The charge to the RRWG was:
"to identify and evaluate existing research related to adult literacy reading instruction in order to provide the field with research-based products including principles and practices for practitioners (Kruidener, 2002, 1).

The focus was upon:
"research related to reading instruction for low-literate adults, aged 16 and older, who are no longer being served in secondary education programs. This includes low-literate adults in community-based literacy centers, family literacy programs, prison literacy programs, workplace literacy programs, and two-year colleges. It includes research related to all low-literate adults in these settings, including adults in ASE (Adult Secondary Education) programs, ESOL (English for Speakers of Other Languages) programs, and adults with a learning or reading disability (Kruidenier, 2002, 1)"

The legislated definition of "scientifically-based research" and the working plan of the National Reading Panel were presented to the adult literacy panel as guidelines. In addition, the adult literacy panel was constructed to include a member who had also served on the National Reading Panel for K-12 reading.

It became clear quite early that any synthesis of adult reading research would have to differ from the National Reading Panel study in several ways. For example, the NRP synthesis had begun with several thousand research studies that were reduced by stringent research criteria to several hundred for inclusion in meta-analyses. Studies of adult literacy instruction number in the hundreds rather than the thousands and only a fraction of these meets the requirements of the legislated definition of scientifically-based research. No quantitative meta-analysis would occur with adult reading instruction practice studies because there was simply not enough available research to justify a meta-analysis. In fact, the total number of qualifying research studies identified in the peer-reviewed literature (including some technical reports) was approximately 70.

This small body of qualifying research necessitated several deviations from the National Reading Panel guidelines. The adult literacy panel decided to arrange information into two categories. These were 1) emerging principles and 2) trends. Emerging principles were based on findings from at least two experimental studies (including quasi-experimental studies) and any number of non-experimental studies. Findings based on fewer than two experimental studies were labeled trends. In addition, the categories of ideas and comments were added. Ideas for ABE reading instruction are based on a thorough review of reading instruction research at the K-12 level (National Reading Panel, 2000) and help to fill the gaps in the ABE reading instruction research base. Comments are weaker, less conclusive findings from the K-12 research.

Guidelines for accepting qualitative studies addressing adult reading instruction were drawn from Denzin & Lincoln (2000) who state that the highest quality qualitative studies are those that collect data using multiple methods and use triangulation of these methods to support findings and any conclusions drawn from them. For techniques such as data coding (whether from transcripts, video tapes, or field notes), training and inter-rater/coder reliability should be performed. Only a few qualitative studies met all criteria of the study and these were case studies corroborating findings of experimental studies.
Research-Based Principles for Adult Basic Education Reading Instruction (Kruidenier, 2002) serves to highlight several gaps in what scientifically-based research on adult literacy can say about instructional practice. Even areas with the strongest research support (i.e. Principles) are supported by only a few studies. Given the criteria used to synthesize K-12 research and indeed standards from many other professions, nearly every area of adult literacy research is a "gap." Researchers proposing to do new research now have a common tool for making the case for the degree to which new research is needed.

The "levels of evidence" approach incorporated into the adult literacy synthesis is useful. Using the Principles, Trends, Ideas, and Comments framework makes it possible to share with educators and researchers the limited research information available while at the same time providing some mechanism for judging the trustworthiness of that information. In addition, the approach is able to highlight the many areas of adult literacy education for which there is an insufficient research base.

The study was able to identify eighteen areas that rose to the level of Principles (i.e. at least two studies that met the criteria for acceptance and corroborating support from other studies). When only the minimum number of studies is available or results are not unanimous, Principles are stated using the word "may." Several of the Principles relate to what research has determined about various adult literacy populations. Some examples of research-based principles related more directly to instruction are:

- **Principle 6**: Phonemic awareness and/or word analysis instruction may lead to increased achievement in other aspects of reading for adult beginning readers.
- **Principle 7**: Word analysis may be taught using approaches that include direct instruction in word analysis along with instruction in other aspects of reading.
- **Principle 10**: Fluency may be taught using approaches that include the repeated reading of passages of text, words from texts, and other text units.
- **Principle 15**: Providing explicit instruction in reading comprehension strategies may lead to increased reading comprehension achievement.
- **Principle 16**: Combining comprehension instruction with instruction in various other components of reading may lead to increased comprehension achievement.
- **Principle 17**: In general, computer-assisted instruction (CAI) is at least as effective as non-CAI in increasing reading comprehension achievement.

In addition to the eighteen Principles, the study produces twenty-nine Trends, twenty-two Ideas, and eight Comments. These later categories tend to be much more specific, but be based on less extensive research and sometimes related research performed with K-12 populations. Some examples of Trends, Ideas and Comments related to instruction are:

- **Trend 13**: ABE adults’ knowledge about reading or their meta-comprehension is more like that of children who are beginning readers. They are less aware than good readers are of strategies that can be used to monitor comprehension, view reading as decoding as opposed to comprehending text, and are less aware of the general structure of paragraphs and stories. They are aware of the influence of motivation, interest, and prior knowledge on reading.
- **Trend 21**: Requiring adults to attend a literacy program in order to receive welfare benefits may not increase reading comprehension achievement.
- **Trend 22**: In programs where a teacher has assistance in the classroom, students may make greater gains in reading comprehension achievement.
- **Trend 23**: Dealing briefly but explicitly with issues related to self-efficacy and motivation among adult learners in a literacy class may lead to increased reading comprehension achievement.
- **Idea 7**: To teach word recognition, use fluency instruction (repeated readings and guided oral reading for example) to supplement regular word recognition instruction.
Idea 15: Encouraging adults to read independently more often may not lead to improvements in reading achievement without other forms of reading instruction.

Idea 18: To improve ABE learners reading comprehension, use a balanced or multiple-components approach to instruction in which all aspects of the reading process are addressed as needed including phonemic awareness, word analysis, and vocabulary as well as reading comprehension.

Comment 3: Pre-teach vocabulary words that ABE learners will encounter in texts being used for instruction.

Comment 7: To improve ABE learner’s general reading comprehension achievement, train their teachers to teach the awareness and use of multiple strategies for reading and understanding texts.

Adult Literacy and Distance Education

In a relatively short time, the nation has made very rapid progress in offering GED and other adult literacy instruction via such Distance Education technologies such as video and online classes. Carol D’Amico, Assistant Secretary, Office of Vocational and Adult Education for the U.S. Department of Education, testified on Improving Adult Education for the 21st Century to a House Subcommittee on 21st Century Competitiveness (D’Amico, 2003). D’Amico set six goals for a quality adult education system. Three of those goals (i.e. increased GED completion, educational options close-by that fit adult schedules, and meeting the special needs of students with disabilities) directly link to state and federal plans to offer GED and adult literacy instruction via distance education.

Nationally, less than 10% of adults without high school diplomas are enrolled in adult basic education programs. Distance education, which has been demonstrating striking successes at the post-secondary level, is seen as a potential tool for increasing access to more basic levels of adult education. Distance learning is defined as instruction mediated by print or some form of technology that takes place when the teacher and learner are separated by space and/or time (Parke and Tracy-Mumford, 2000). Instruction can take many forms, from stand-alone instructional programs on television or online, to a set of videotapes that supplements or extends classroom learning, to special materials and help delivered over the Internet. One goal of distance learning is for learners to access education anytime, and anywhere through synchronous (real-time) and asynchronous (delayed time between interactions) delivery.

Parke and Tracy-Mumford (2000) report the results of a survey of state directors of adult education about their involvement in implementing distance education for adult learners. Thirty-one of the 50 states in the United States report distance learning as a current initiative or in a future plan to provide education delivery to adult learners. The most often mentioned technologies reported by state directors are computer technology, such as the Internet, and video technology such as videoconferencing over cable or satellite links and videotapes. In 2000 virtual high schools or cyber highs for adults are currently offered in at least seven states: Colorado, Delaware, Florida, Minnesota, Missouri, Nebraska, and Vermont. The number of states has grown since then to include Illinois, Mississippi, and Kentucky while Alabama is piloting an Online High School. Target populations for state plans to offer adult distance learning are:

- **GED**: 41 states
- **ABE**: 33 states
- **ESL**: 32 states
- **Prison**: 14 states
- **Adult High School**: 13 states.
The national survey of state directors found that 47 states provide state funding for distance learning efforts, though not all provide funding for adult education distance learning. Florida, California and New York provide more than $1 million per state annually. The Parke and Tracy-Mumford report concludes with case studies of the multiple distance education resources available in California and the statewide Diploma-At-A-Distance program in Delaware.

The Public Broadcast System has developed video lessons to be used for GED preparation (39 episodes of GED Connection) and workplace skills (25 episodes of Workplace Essential Skills). These episodes have previously been available by satellite broadcast and by states securing master tapes from which unlimited copies can be made for state supported programs. Thirty-one states have secured GED Connection licenses and twenty-five have secured Workplace Essential Skills licenses (LiteracyLink, 2003).

In addition to state-supported video and online GED programs, the last two years have seen the emergence of online programs being offered by community colleges and private entrepreneurs. Rio Salado College (Arizona) Pinnellas Technical Education Center (Florida), Miami-Dade Community College (Florida), Caldwell Community College (North Carolina) and Lane Community College (Oregon) all advertise on the Internet as having online GED programs. The Online Training Institute (a private company) offers five different GED preparation courses at $150.00 each and a package deal of all five for $600.00. There are special group rates available. Another company (Universal Class) offers a GED preparation course for $39.00 ($10.00 off if you enter a promotional code). Still another company, GEDonline, charges by the month ($50 for first 4 months and $10.00 per month thereafter). Class practice booklets cost an additional $10.00 apiece and several payment plans and payment options are listed. GED Prep from Free-Ed.Net appears as a resource on the National Institute for Literacy LINCS. This program is advertised as “Free! No hidden costs! No strings attached!” This GED program appears to have an extensive list of 74 study units. The only information on the web-site indicating how the work is subsidized is the following statement, “It is often said that there is no such thing as a free lunch. So who's paying the way for Free-ed.net? For the time being, let's just say that advertising is paying the way.”

To date, I know of no rigorous studies assessing the quality and effectiveness of any of the above distance education GED and basic skills programs. On the other hand, I know of very few rigorous studies assessing the effectiveness of face-to-face GED programs. What does seem clear is that there is a good deal of public and private activity in this area of distance education and that this activity is likely to continue—especially if efforts prove cost-effective, profitable and self-sustaining.

Linking Adult Literacy to K-12 Standards and Career Paths

On March 4, 2003 Assistant Secretary of Education, Carol D'Amico testified before the House of Representatives Subcommittee on Labor/Health & Human Services/Education Appropriations. She indicated that the proposed budget for the Office of Vocational and Adult Education outlines "fundamental changes" believed necessary in the face of changing economic and social demands. The testimony underscored plans to incorporate into adult education the principles of:

- accountability for student performance,
- focusing on what works,
- reducing bureaucracy and increasing flexibility, and
- providing options and choices for students.

The States’ role, according to D’Amico,
"is to ensure quality programs through the competitions they hold among possible providers, through statewide program improvement activities, and through the accountability system (p. 8)."

D’Amico outlined a vision that included programs providing documented results of adult learner achievement of academic skills. She highlighted California’s standards for adult English literacy programs and New York’s moves to adapt K-12 academic standards to adult education programs. In addition, a good deal of the testimony as well as information available on the OVAE webpage bespeaks a concerted effort to link adult education more closely to employment and career paths.

The Office of Vocational and Adult Education publishes a bi-weekly review. Since the beginning of 2003, this review has consistently highlighted the need for stronger connections between Adult Education and career paths that often lead through community colleges and employment. Here is a sampling of story headlines and quotations from the last few months of the OVAE Review (U.S. Dept. of Education, OVAE Review, 2003).

"Ease College Transition for Adult Students" (1/10/03)
"Skills for the Knowledge Economy" (1/23/03)
"ME Partnership to Smooth Transition form Adult Ed to College" (2/10/03)
"The federal system of support for adult literacy programs has not been able to fully address the gap between literacy skills needed to effectively function in the labor market and the current level of literacy possessed." (3/7/03)
"Building Bridges to College and Careers: Contextualized Basic Skills Programs at Community Colleges" (3/7/03)
"Amendments (to the Adult Education and Family Literacy Act) would promote greater participation of employers and create incentives to strengthen coordination among education and employment programs that serve low-literate adults to ensure that these resources are spent effectively and generate the greatest returns." (4/4/03)

D’Amico underscores these priorities in her remarks to the House subcommittee on appropriations. She calls setting high standards for adult literacy programs and learners.

"For adults, standards should be calibrated against real-world expectations, such as entering postsecondary education or the workforce. Therefore, the standards should be developed in consultation with employers and postsecondary educators (p. 10)."

D’Amico also urges legislation to promote accountability of programs at both state and local levels. She calls for:

"incentives for success and much more explicit consequences for failure to perform including both technical assistance and sanctions (p. 13)"

"We will ask States to present a plan to increase the accountability of agencies they fund . . . Ultimately, States should stop funding grantees that are not effectively serving the public . . . we believe the Federal legislation should strengthen States’ authority over local performance. (p. 13)"

Conclusion

New initiatives by the U.S. Department of Education, various states, community colleges, and private education organizations reflect some growing trends in the adult literacy field. These trends include:

1) A growing emphasis of program accountability and links to “scientifically-based” research.
2) Instruction (both private and taxpayer funded) being delivered via distance education, and

3) Moves to more closely link adult literacy instruction to employment, career paths, and on-going postsecondary education.

These trends are occurring within a context of U.S. Department of Education calls for legislation to expand the ability of the department to use incentives and sanctions to more effectively implement program compliance at state and local levels. For better or for worse, Adult literacy education is being considered as part of broader K-16 education efforts emphasizing standards, assessment, and research-based instruction.
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