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No Child Left Behind: Implications for Assistive Technology

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Signed by President Bush in January of 2002, the No Child Left Behind Act (NCLB) is recognized as a truly significant shift in overall federal education policy. The education of many students has already been affected and there will be a cumulative impact as time goes on. There are several areas of NCLB that may relate to assistive technology (AT) in the education of students with disabilities.

Accountability is one of the core features of NCLB, which has paired increased accountability with parental choice in the case of low-performing schools. NCLB requires annual testing for all students in grades 3-8, including those with disabilities. Whereas in the past some students with disabilities were actually discouraged from taking standardized tests, now school districts and schools will fail to make adequate yearly progress (AYP) unless the children with disabilities also make progress. (They fail to make AYP if any significant group, including minorities, economically-disadvantaged, and ELL, does not make progress.) Parents can choose to transfer a child out of a low performing school after a single year without progress, and the school faces restructuring measures if no progress is made in 5 years. Ironically, parents can also choose to exempt their child from testing and if enough do so, then the school will fail to make AYP because too few students will be tested.

Testing Exemptions: In general, only students with the most significant cognitive disabilities (up to a 1% cap) are exempt from standard testing and thus eligible for an alternate assessment. This is equal to approximately 9 % of students with disabilities. States must still document that students with the most significant cognitive disabilities are, to the extent possible, included in the general curriculum and participating in assessments aligned with content standards. States may also apply to the Secretary for exceptions in order to exceed slightly the 1.0 percent cap.

The implications for assistive technology relate to the need for more students with disabilities to have access to both standard curriculum and testing. In terms of access to standard curriculum, children with disabilities cannot do well on state testing without access to the general education curriculum, so there is a stronger focus on bringing standard curriculum to these students.[i] For some, no access is possible without AT. For others, as has been demonstrated through research, appropriate AT can greatly enhance access and learning.

NCLB states that children who need accommodations including AT in order to participate in testing are to be provided with them, however it's up to individual states to determine what accommodations are allowed without rendering the results unreliable or invalid. NCLB also encourages the development, dissemination, and promotion of appropriate accommodations to increase the number of students with the most significant cognitive disabilities who are tested against grade-level academic achievement standards.

> *With states preparing to test so many more special education students who would otherwise have been exempt from the process, some states are already coming up with innovative technological accommodations. Oregon is devising a test that would allow hearing-impaired students to use American Sign Language. By clicking on either English or ASL, the students could choose to read the problems in English text or see a pair of hands signing the questions—or even split the screen with both English and ASL.*[ii]

In Massachusetts, students with reading disabilities or visual impairments who use the text readers for their regular classroom work will be eligible to take statewide assessments using the text readers. In California, those with an IEP or 504 plan can use Braille or large print, while other accommodations are only available to those who regularly use them in the classroom.[iii] The Council on Exceptional Children (http://www.cec.sped.org/) has adopted a policy on assessment and accountability that expresses support for the inclusion of all students in testing and describes the implications of this policy.

According to Dave Edyburn, associate professor at the University of Wisconsin-Milwaukee, there is an urgent need to norm the use of AT on standardized tests. Students with disabilities need these special devices and services in order to learn, and in order to demonstrate their true abilities. The use of AT should not be banned because it is considered by some to be an unfair advantage.

Highly qualified teachers: NCLB requires that all teachers in core academic areas be "highly qualified" not later than the end of the 2005–06 school year. It's up to individual states to define certification levels. This is having the effect in some states of moving away from certification based on number of courses completed towards certification based on skills and knowledge.

To the extent that the ability to be effective in teaching students with disabilities is included in revised certification processes, AT may be included in a more integrated fashion in teacher professional development. Unfortunately, one review of the teaching quality mandates of NCLB done in the fall of 2003 indicates that NCLB may be lowering the bar for teacher credentialing in some states. [iv] The definition of highly qualified can be honed with research at the national level, and activism at the state level.

Research-based practice: Spurred, in part, by requirements in the Individuals with Disabilities Education Act (IDEA) and the No Child Left Behind Act (NCLB), the use of scientifically derived information—or data—has become a significant part of educational programming for children with disabilities.[v] With the NCLB emphasis on research-based practice, there may be more interest and dissemination of AT research. For instance, research indicates that talking word processors and word prediction increase the quality of written work for students with learning disabilities.[vi] One could assume that this would support the increased use of such tools in classrooms. Research also shows how AT can

be most effective. For instance, simply hearing written text read aloud does not increase comprehension unless supporting questions and organizational supports have been added. (A number of strategies that can be considered AT are described in *Learning to Read in the Computer Age* available at http://www.cast.org.)

Looking Forward: Details of implementing NCLB continue to evolve, with the issuance of policy letters from the U.S. Secretary of Education. In February of 2004, a number of policy changes were announced related to ELL students, that reflect a response to feedback from the field. A similar refinement could occur related to the use of AT in testing students with disabilities.

In addition, IDEA (Individuals with Disabilities Education Act) is up for reauthorization (H.R.1350 and S.1248) in the spring of 2004. Some fear that changes in IDEA, made in part to align it with NCLB, will have a negative impact on students with disabilities.[vii] Flexibility in how schools spend federal funds for IDEA could have a negative impact on the use of assistive technology.

Dave Edyburn points out that there is little evidence to suggest that all students who could benefit from AT have access to it.[viii] "As a result, renewed efforts must be focused on the use of technology to enhance academic performance. We must commit to collecting evidence about how AT enhances academic performance. A question I increasingly ask, "How much failure data do we need to collect before we know a student can't do a task?" Even prior to NCLB we knew many students with disabilities were failing to make academic progress. New accountability measures don't change that. However, what is being obscured in the current NCLB era is–what do we do about deficits in performance? A particularly divisive and unresolved issue concerning assistive technology and reading is: when do we give kids AT to compensate for the inability to read at grade level? 4th grade, 9th grade, never? [ix] Again, how much failure data do we need before we know a student can't do a given task? And, what do we do about it to make them successful? Remember, NCLB says that failure is not an option."

Role for advocates: What can parents, teachers, and other AT advocates do to use NCLB to promote an increase in both universally designed technology and AT?

1. Volunteer to serve on the local educational agency committee that has drafted and will be revising the local plan for implementation of NCLB to advocate for best practices related to students with disabilities.
2. Inquire with your state department of education as to ways in which you can have input to master plans related to NCLB and/or teacher credentialing.
3. Become knowledgeable about your state's testing accommodations so that you can help disseminate this information.
4. Keep up on research that demonstrates that AT and features of universally designed software are effective strategies.

NLCB Resources

U.S. Department of Education website on NCLB, including new policy updates: http://www.ed.gov/nclb/

School Choice Opportunities under No Child Left Behind discusses the implications of school choice for students with disabilities.

http://www.schwablearning.org/articles.asp?r=778

Quality Counts 2004: Count Me In, Special Education in an Era of Standards, Education Week Special Report, January 2004, http://www.edweek.org/sreports/qc04/article.cfm?slug=17exec.h23

Implementing the NCLB Act: What It Means for IDEA, June 2002 http://www.nasdse.org/downloadncb.htm

The No Child Left Behind Act of 2001:Implications for Special Education Policy and Practice: Selected Sections of Title I and Title II September 2002. http://www.ideapractices.org/ideanews/files/issue.php?iss=14#105

No Child Left Behind Act of 2001: Reauthorization of the Elementary and Secondary Education, A Technical Assistance Resource, December 2003, Council on Exceptional Children http://www.cec.sped.org/pp/OverviewNCLB.pdf

Resources for Research-based Practices Involving Assistive and Educational Technology

- CAST, http://www.cast.org
- U.S. Department of Education, What Works Clearinghouse, http://www.w-w-c.org/
- U.S. Department of Education, Office of Educational Technology, http://www.ed.gov/about/offices/list/os/technology/index.html?exp=0
- Quality Indicators for Assistive Technology Services in School Settings, http://sweb.uky.edu/~jszaba0/QIAT.html
- EdTechNot links to research on Educational Technology, including Ask ERIC, http://www.edtechnot.com/notresearch.html

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Feedback: WestEd and ATA welcome your feedback on this article, which addresses changing situation. Any comments can be sent to jduffie@wested.org and/or to lisawahl@ataccess.org.

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ENDNOTES:

[i] Council for Exceptional Children, *No Child Left Behind Act of 2001: Reauthorization of the Elementary and Secondary Education, A Technical Assistance Resource*, December 2003, http://www.cec.sped.org/pp/OverviewNCLB.pdf

[ii] Goldstein, Lisa Fine. "Special Education Tech Sparks Ideas." *Education Week*. 21 Jan. 2004 http://www.edweek.org/sreports/tc03/article.cfm?slug=35speced.h22

[iii] *California Special Education Accommodation/Modification for Statewide Testing* can be downloaded from http://www.cde.ca.gov/statetests/

[iv] *NCLB Teaching Quality Mandates: Findings and Themes From the Field,* Southeast Center for Teaching Quality, December 19, 2003, http://www.edpolicy.org/research/nclb/index.php

[v] *Research Connections in Special Education,* Number 13, Fall 2003 "Using Data Innovative Ways to Improve Results for Students with Disabilities" http://ericec.org/osep/recon13/rc13cov.html

[vi] MacArthur, C. A.(1998). Word processing with speech synthesis and word prediction: Effects on the journal writing of students with learning disabilities. *Learning Disability Quarterly, 21*, 1-16.

[vii] See http://www.wrightslaw.com/news/idea2002.htm and http://www.ourchildrenleftbehind.com

[viii] Edyburn, D.L.(2003). Rethinking assistive technology. *Special Education Technology Practice, 5(4), 16-22*.

[ix] Edyburn, D.L.(2003). Learning from text. *Special Education Technology Practice, 5(2), 16-27*.