

## Technical Assistance Response on Dropout Prevention

### Question:

What are good sources of information on credit recovery policies and practices as well as available evidence of their effectiveness?

The National High School Center conducted a search for relevant programs and resources for credit recovery. We found a variety of programs that included alternative learning environments and online programs that can be accessed before, during, or after school.

Table 1 consists of 15 programs that offer students options to obtain credit. Many of these programs were used for credit recovery in addition to other purposes (e.g., tutoring). A description of each program is provided in addition to any evidence of the program's effectiveness.

**Table 1. Programs That Offer Credit Recovery**

Program	Description	Type of Program	Evidence of Effectiveness
A+nywhere Learning Systems For more information: <a href="http://www.amered.com">http://www.amered.com</a>	A+ Credit Recovery Bundle is designed to get students back on track to graduate through the use of a computer-based, individualized curriculum. The bundle provides courses in five core areas: mathematics, literature and the arts, writing, science, and social sciences. Pretests assess skill deficiencies and assign lessons. Posttests measure academic gains.	Online	Limited evidence of the program's effectiveness is posted on the developer's Web site.
Aventa Learning For more information: <a href="http://aventalearning.com">http://aventalearning.com</a>	Aventa Learning offers many online courses for K-12, including online high school courses that are geared toward credit recovery for students who are repeating coursework owing to failure or making up other credits for graduation. The aim is for students to focus on content they did not master the first time around and not waste time on material they have already learned.	Online	No research was found by the National High School Center.

Program	Description	Type of Program	Evidence of Effectiveness
Alee Academy	Alee Academy is a charter school in Lake County School District that gives at-risk	Alternative learning	Some evidence supports the

Program	Description	Type of Program	Evidence of Effectiveness
For more information: <a href="http://aleeacademy.org">http://aleeacademy.org</a>	students, adjudicated youth, and former dropout students the opportunity to develop vocational skills, gain employment, and earn a high school diploma through credit recovery and the GED Exit Option Program. Instructional methods include direct teacher instruction, one-on-one tutoring, computer-assisted learning, field trips, individualized instruction, collaborative learning, and work site training. In addition, several unique programs, such as a martial arts curriculum, the sandwich shop, the ropes course, and the boat-building program, offer students a diverse learning environment. Alee Academy also establishes partnerships with local businesses.	environment	effectiveness of the Alee Academy. Since its beginning, Alee has increased graduation rates and test scores for its students.
Apex Learning For more information: <a href="http://www.apexlearning.com">www.apexlearning.com</a>	One of the concentrations of Apex Learning's summer school digital curriculum is credit recovery for high school students. The curriculum allows acceleration opportunities, transition, and remediation. Apex Learning also provides online AP Exam Review and High School State Exam Preparation.	Online	No research was found by the National High School Center.
AutoSkill For more information: <a href="http://www.autoskill.com">www.autoskill.com</a>	Two AutoSkill programs—Academy of MATH and Academy of READING—are designed as interventions to help at-risk high school students develop basic mathematics and reading skills.	Online	Some evidence suggests that AutoSkill has positive effects on student achievement. However, the only research found was on the developer's Web site, and the existing research did not focus on credit recovery as an outcome.

Program	Description	Type of Program	Evidence of Effectiveness
Cognitive Tutor Software For more information: <a href="http://www.carnegielearning.com">www.carnegielearning.com</a>	Carnegie Learning's Cognitive Tutor is an intervention curriculum designed to assist struggling mathematics students. Curricula include Bridge to Algebra, Algebra I, and Algebra II. The software can be combined with classroom instruction for a blended curriculum.	Online	Some evidence suggests that Cognitive Tutor Software has positive effects on student achievement. Research studies are posted on the developer's Web site.
Credit Recovery Program (Aldine ISD) For more information: <a href="http://www.aldine.k12.tx.us/index.cfm">www.aldine.k12.tx.us/index.cfm</a>	This lab-based program serves students attending schools in the Aldine, Texas, Independent School District. Students can access the online program PLATO from any of the 50 labs across the district or from anywhere a computer is available, such as their home or library.	Online	Some evidence suggests that the program has decreased the dropout rate and increased the graduation rate and scores on the Texas Assessment of Academic Skills (TAAS). The program has assisted students in recovering credits.
ED Anywhere (Credit Recovery Track) For more information: <a href="http://www.edanywhere.com">http://www.edanywhere.com</a>	Ed Anywhere is an alternative education program designed for use in public, private, home school, and other academic settings. The program provides other services in addition to credit recovery, including remediation, skill building, tutoring, and standardized test prep.	Online	No research was found by the National High School Center.
EdOptions For more information: <a href="http://edoptions.com">http://edoptions.com</a>	EdOptions provides Web-based programs that are intended to help students in a variety of ways, including credit recovery. These programs are designed to meet the needs of individual students in a nontraditional setting.	Online	Some evidence of the program's effectiveness is posted on the developer's Web site.
EDUCATION 2020 For more information: <a href="http://www.e2020inc.com">www.e2020inc.com</a>	EDUCATION 2020 is designed to help students graduate from high school by providing one-on-one online instruction. Virtual online courses allow students to recover credits.	Online	According to its Web site, the program has a research base that shows it is effective in improving student achievement, raising graduation rates, and reducing dropout.

Program	Description	Type of Program	Evidence of Effectiveness
<p>Kids in New Directions (K.I.N.D.) Alternative Learning Program</p> <p>For more information: Sherry Henson, Program Administrator MSD Lawrence Township 9425 East 59th Street Indianapolis, IN 46216 Telephone 317-568-4815 Email: sherryhenson@msdlt.k12.in.us</p>	<p>The Kids in New Directions (K.I.N.D.) Alternative Learning Program consists of four separate programs that work simultaneously to meet the needs of their students: K.I.N.D Middle School (grades 6–8), Lawrence Opportunity Program (grades 9–12), Senior Save Saturday (students who attend the traditional school full-time but are short on credits), and Diploma Recovery Program (students 18 and older). Although students are exposed to the same coursework as their peers, they receive additional support and individualized instruction that is computer-based. The program operates on an extended schedule, 6 days a week from 7:30 a.m. to 7:00 p.m., to give students greater flexibility on when they can attend school.</p>	<p>Extended day</p>	<p>No research was found by the National High School Center.</p>
<p>Miller Education Center</p> <p>For more information: <a href="http://www.hsd.k12.or.us/miller78/default.htm">www.hsd.k12.or.us/miller78/default.htm</a></p>	<p>Miller Education Center offers students who are struggling in traditional school settings four alternative education programs: a middle school; an upper school; a twilight school, which provides credit recovery opportunities; and an outreach recovery program, which helps bring dropouts back to school. Classes are small to offer students a more personalized learning environment.</p>	<p>Alternative learning center</p>	<p>No research was found by the National High School Center.</p>
<p>NovaNet</p> <p>For more information: <a href="http://www.pearsondigital.com">www.pearsondigital.com</a></p>	<p>One of Pearson Digital Learning's concentrations is credit recovery. NovaNet is an online program that is intended to help at-risk students recover credits necessary for graduation.</p>	<p>Online</p>	<p>Although the research base for NovaNet is available on the developer's Web site, the National High School Center found no research examining the program's effectiveness.</p>
<p>Odysseyware Online</p> <p>For more information: <a href="http://www.odysseyware.com">www.odysseyware.com</a></p>	<p>Odysseyware Online is a Web-based curriculum for elementary, middle, and high school students. The program offers teachers and administrators the tools needed to individualize instruction and manage student data.</p>	<p>Online</p>	<p>No research was found by the National High School Center.</p>

Program	Description	Type of Program	Evidence of Effectiveness
PLATO For more information: <a href="http://www.plato.com">www.plato.com</a>	One of PLATO's focus areas is providing credit recovery options for at-risk students. The online curriculum is designed to give students the opportunity to recover credits.	Online	PLATO's Web site notes that "PLATO Learning is the industry's undisputed expert in proven, effective credit recovery solutions." An abundance of research examining the program's effectiveness suggests that the program has a positive effect on student achievement, including credit recovery.

Table 2 is a sample of states and districts that have credit recovery programs. All the programs are online and many serve a mission that includes but is broader than credit recovery. The list is not exhaustive but does provide a sample of state- and district-level activity with regard to credit recovery.

**Table 2. State- and District-Level Examples of Credit Recovery Programs**

State/District	Description	Type of Program
Florida For more information: <a href="http://www.flvs.net/educators/fact_sheet.php">http://www.flvs.net/educators/fact_sheet.php</a>	<i>Florida Virtual School (FLVS)</i> In 2000, the Florida Legislature established FLVS as an independent educational entity with a gubernatorial-appointed board. FLVS is the only public school with funding tied directly to student performance. It appears to run separately from the Florida SEA. FLVS provides online courses for grades 6–12, both in Florida and out of state. FLVS was founded in 1997 and serves middle and high school students with more than 90 courses.	Online
Georgia For more information: <a href="http://www.gavirtualschool.org/Default.aspx?tabid=170">http://www.gavirtualschool.org/Default.aspx?tabid=170</a>	<i>Georgia Virtual High School</i> The Georgia Department of Education developed the Georgia Virtual High School, a system of credit recovery using online courses that are aligned with the state standards.	Online
Illinois For more information: <a href="http://www.ivhs.org/index.learn?bhcp=1">http://www.ivhs.org/index.learn?bhcp=1</a>	<i>Illinois Virtual High School</i> The Illinois Virtual High School serves students who need to recover credits and are at risk of dropping out of high school. It also gives traditional students access to specialized courses. (Article: <a href="http://hb1.eschoolnews.com/resources/dropout-prevention-and-credit-recovery/articlesdp/index.cfm?rc=1&amp;i=36699">http://hb1.eschoolnews.com/resources/dropout-prevention-and-credit-recovery/articlesdp/index.cfm?rc=1&amp;i=36699</a> )	Online

State/District	Description	Type of Program
Indiana For more information: <a href="http://www.flvs.net/educators/fact_sheet.php">http://www.flvs.net/educators/fact_sheet.php</a>	<i>Indiana Virtual Academy (IVA)</i> The IVA is the result of a consolidated effort of Ripley County schools and provides online course offerings aligned with Indiana's state standards to all students, including those in need of credit recovery.	Online
Maryland: Baltimore Public Schools For more information: <a href="http://www.bcps.k12.md.us/students/twilight_school_programs.asp">http://www.bcps.k12.md.us/students/twilight_school_programs.asp</a>	<i>Twilight and Credit Recovery Program</i> Baltimore Public Schools has a twilight and credit recovery program for students who have fallen behind. The curriculum, called NOVEL, is online. It is an Internet Web-assisted program that assesses each student and identifies a course of study for each student who has failed a course. Every high school course that a student needs for graduation is provided in this program, excluding physical education, foreign language, and technology education. Each course has two semesters of coursework, excluding health, which has just one semester. The courses have a midterm and a final. Students use the computer to complete the assignments and lessons.	Online
North Carolina For more information: <a href="http://www.ncvps.org/">http://www.ncvps.org/</a>	<i>LEARN NC Project Recovery</i> Project Recovery is a joint program of the LEARN NC and the North Carolina Department of Public Instruction (DPI), aimed at offering high-quality, online instruction to at-risk students. Project Recovery is part of the North Carolina Virtual School and offers school systems more flexibility in their credit recovery programs by providing different options in teaching. In summer 2006, Algebra I, Biology, Civics and Economics, Earth Science, English I, English II, Latin I, Physical Science, and U.S. History courses were made available to schools at no charge. LEARN NC provides high-quality, experienced online teachers. Summer recovery courses are provided in two sessions. Students may enroll in part A, part B, or both halves of the course during the summer, and DPI has funded a limited number of enrollments in the program. (Schools wanting to enroll students after DPI has exhausted its funding may do so at a cost of \$150 per 4-week enrollment.) Also see Rhea (2007) cited below.	Online

## Additional Resources

Muir, M. (2006). *Research brief: Credit recovery*. The Principals' Partnership and Union Pacific Foundation. Retrieved June 16, 2008 from the Principals' Partnership and Union Pacific Foundation Web site: <http://www.principalspartnership.com/creditrecovery.pdf>.

This document is a compilation of resources regarding credit recovery that includes Web links and summaries. (National High School Center description)

Rhea, A. (2007). *North Carolina Virtual Public Schools review of summer school*. Wake County, NC: Eye on Evaluation. Retrieved October 27, 2008, from the Wake County Public School System Web site: [http://www.wcps.net/evaluation-research/reports/2007/0706nc\\_virtual\\_schools.pdf](http://www.wcps.net/evaluation-research/reports/2007/0706nc_virtual_schools.pdf).

In summer 2007, 995 Wake County Public School System (WCPSS) students enrolled in online courses provided free of charge by the North Carolina Virtual Public School (NCVPS). Whereas most students were seeking to recover credits, some students enrolled in courses for credit acceleration. Students who elected to take accelerated courses were more likely than students registered for credit recovery courses to terminate their enrollment. Few students who initially enrolled in NCVPS had successful academic outcomes, as indicated by the small proportion who received passing course grades from NCVPS (28.2%) and who demonstrated proficiency on End-of-Course (EOC) exams (13.5%). However, students enrolled for credit acceleration had higher success rates on both measures than students trying to recover credits. Survey results reveal that students taking accelerated EOC courses were also likely to possess the characteristics attributed to successful online learners. The guidelines for enrollment and the structures and processes of NCVPS should be evaluated to assess whether participation in NCVPS is an appropriate option to promote students' academic success. (Author description)

As mentioned, many of the credit recovery programs are online. For that reason we have also included these other resources about online programs and virtual schools that may be helpful.

## Research

Ash, J. (2001). *The effectiveness of A+ Software on achievement on mathematics students in a high school setting*. Submitted in partial fulfillment of requirements of FOED 7610, College of Education, Middle Tennessee State University.

Although this is not a credit recovery study in particular, it is an evaluation of mathematics online software, and it discusses the impact on student achievement, particularly in mathematics. (National High School Center description)

Cavanaugh, C. S. (2001). The effectiveness of interactive distance education technologies in K–12 learning: A meta-analysis. *International Journal of Educational Telecommunications*, 7(1), 73–88.

This meta-analysis examines the research on interactive distance education technologies. The study provides some support for using interactive distance education technologies to supplement the education curriculum. (National High School Center description)

Cavanaugh, C., Gillan, K. J., Kromrey, J., Hess, M., & Blomeyer, R. (2004). *The effects of distance education on K–12 student outcomes: A meta-analysis*. Naperville, IL: Learning Point Associates.

This meta-analysis examines the research on distance education programs. Nineteen experimental and quasi-experimental studies are included. Overall, there is a small but positive effect favoring distance education programs. (National High School Center description)

Dickson, W. P. (2005). *Toward a deeper understanding of student performance in virtual high school courses: Using quantitative analyses and data visualization to inform decision making*. Lansing, MI: Michigan Virtual University.

This study explored the variations in student performance at Michigan Virtual High School (MVHS) and found that there is great diversity in performance that depends on the type of course taken (e.g., credit recovery versus advanced placement). Additionally, simple models for data visualization and organization were developed. It concludes with a discussion of strengthening data systems at MVHS and recommendations for the future. (National High School Center description)

Evaluation Group. (2007). *The evaluation of the Texas High School Completion and Success (THSCS) Grant Program: Final report*. College Station, TX: Texas A&M University, College of Education and Human Development, Department of Teaching, Learning, and Culture, Evaluation Group.

This report is an assessment of the Texas High School Completion and Success program, which includes programs for credit recovery. The report found positive impacts on student achievement. However, credit recovery outcomes are not discussed. (National High School Center description)

Kiekel, J. (2007). *Characteristics of high school online educational programs: A multiple case study*. Submitted in partial fulfillment of Doctor of Philosophy, Department of Secondary Education, College of Education, Kansas State University.

This dissertation presents three case studies on high schools that use online courses. (National High School Center description)

## Other resources

Fratt, L. (2005). Algebra's at-risk solution. *District Administration*, 42(10), 58–63.

This article highlights some interventions under way in several districts that use technology to help at-risk students succeed in algebra. Because of the importance of algebra as a gatekeeper course, the high rates of failure for algebra courses, and high school graduation requirements, districts have turned to technology to meet the needs of students who have demonstrated difficulty with more traditional methods. Districts can use software-based credit recovery programs to assist these students. (National High School Center description)

Hassell, B. C., & Terrell, M. G. (2004). *How can virtual schools be a vibrant part of meeting the choice provisions of the No Child Left Behind Act?* U.S. Department of Education Secretary's No Child Left Behind Leadership Summit, Increasing Options Through E-Learning. Washington, DC: U.S. Department of Education.

This white paper provides an overview of online courses and how NCLB may influence the demand for online courses. Resources are also provided. (National High School Center description)

Murphy, K. (2005). *Factors associated with successful high school distance education programs*. Submitted in partial fulfillment of Doctor of Philosophy, Department of Educational Leadership and Policy Analysis, East Tennessee State University.

This dissertation reviews and discusses different online programs for Tennessee high school students. (National High School Center description)

North American Council for Online Learning Web site: <http://www.nacol.org/>.

This site provides access to other resources and reports on online learning. It is not particular to any content area or type of virtual school. (National High School Center description)

National Center for Education Statistics. (2004). *Virtual School Initiatives as study details distance learning, electronic education report*. Washington, DC: National Center for Education Statistics.

This brief article discusses a report by the National Center for Education Statistics that shows that Florida Virtual School and Michigan Virtual High School are the largest programs, with more than 10,000 registrations per year. Other states' virtual schools are also growing rapidly both for students interested in taking more advanced courses and for those who rely on virtual school for credit recovery. In rural areas, video conferences are more common, whereas Internet courses are more popular in urban settings. Cost of courses and quality are noted as major concerns in using virtual schools. (National High School Center description)

Smith, R., Clark, T., & Blomeyer, R. L. (2005). *A synthesis of new research on K–12 online learning*. Naperville, IL: Learning Point Associates.

This is a research synthesis on K–12 online learning options. (National High School Center description)

Trotter, A. (2008, May 19). Online options for "credit recovery" widen. *Education Week*.

This article discusses the increase in online options for credit recovery. (National High School Center description)

Watson, J. (2005). *Keeping pace with K–12 online learning: A review of state-level policy and practice*. Naperville, IL: Learning Points Associates.

This report reviews K–12 online learning and looks specifically at two areas: state-level policies governing online education and statewide online programs (i.e., programs created by legislation or by a state-level agency, and/or funded or administered by a state department of education or another state-level agency to provide online learning opportunities across the state). (National High School Center description)

Watson, J. F., Winograd, K., & Kalmon, S. (2004). *Keeping pace with K–12 online learning: A snapshot of state-level policy and practice*. Retrieved June 16, 2008, from the Illinois Mathematics and Science Academy Web site: [http://www.imsa.edu/programs/ivhs/pdfs/Keeping\\_Pace.pdf](http://www.imsa.edu/programs/ivhs/pdfs/Keeping_Pace.pdf).

This study was conducted to ascertain what states are doing to address the need for policy guidance. The report provides information on specific topics of K–12 online learning policy and practice as well as analysis and discussion of the issues. To obtain current and practical information on policies and practices across the nation, four organizations joined to fund and guide this study. The partnering organizations—Colorado Department of Education, Illinois Virtual High School, Learning Point Associates, and Wisconsin Virtual School—contracted with two

consultants to conduct research through telephone interviews, literature reviews, and Internet searches. The consultants obtained and evaluated information related to the following issues in state-level policies and statewide online education programs: ensuring the quality of online learning experiences; determining how to pay for online learning; supporting policies geared to special needs students and nontraditional students; and combining state, district, and program policies into an effective framework. (Adapted from author's description.)

Watson, J. (2008). *Blended learning: The convergence of online and face-to-face education*. Naperville, IL: North American Council of Online Learning. Retrieved on October 27, 2008, from the North American Council of Online Learning Web site: [http://www.nacol.org/resources/promising\\_practices.php](http://www.nacol.org/resources/promising_practices.php).

Blended learning combines the best elements of online and face-to-face learning and is likely to emerge as a predominant method of teaching and learning. It is being implemented by schools throughout the country and the world, and in some cases it has been under way for several years. Scott Hornblower, Principal of the Cincinnati Public Schools Virtual High School, said "[Cincinnati Public Schools Virtual High School] took a distance learning tool—digital curriculum—and made it the primary delivery system of curricula in the brick-and-mortar institution. It took the risk out of at-risk. Because students work on computers to access all of their content, they are developing better computer skills and a greater comfort level with technology than many traditional students." This and other examples throughout the paper demonstrate the ways blended learning is being used to increase educational opportunities and outcomes for students. (Adapted from author's description.)

**NOTE:** Since the original technical assistance response was developed, other more recent resources may be available on our Web site: [www.betterhighschools.org](http://www.betterhighschools.org).