

Providing Students with Alternate Paths to Graduation

Districts can increase opportunities for students to graduate by offering multiple, alternate paths to graduation. Indeed, “multiple pathways enable districts to diversify and expand students’ learning options as they pursue a high school diploma.”¹ In this report, “multiple pathways” refers to offering a variety of curricular and instructional ways for students to meet the [Virginia requirements for a standard diploma](#) beyond traditional academic models.

As part of their commitment to support improved graduation rates, the Virginia Department of Education provides school leaders with a Graduation, Drop Out, CCCR Tool that includes strategies for cohort planning, data collection and analysis, CTE, and communication. Through the GCI, or Graduation and Completion Index, a district’s data for students earning a full diploma impact accreditation ratings and is published on the district’s report card.

Multiple pathways provide options for all students to meet the rigorous expectations of a standard diploma. Notably, this report focuses on providing students with alternative options to gain credits, rather than instituting alternative standards or expectations. Preventing students from dropping out of high school requires holding all students to rigorous expectations, and research suggests that developing an alternative set of expectations raises significant equity issues. For example, Ohio offered an alternative graduation requirement option in 2018, which resulted in a correlation of participating in alternative requirements with race and SES, where it was traditionally disadvantaged students meeting the alternate lower standards, creating two sets of expectations according to student demographics.² This emphasizes the critical importance of maintaining high expectations while offering students options to meet those expectations that fit their needs.

While effectively preventing student drop out and increasing graduation rates requires a holistic approach of holding all students to rigorous requirements and providing individual support,³ this report focuses on strategies for delivering credit pathways for high school students already at-risk of dropping out. Notably, schools should employ these strategies as part of a larger initiative to identify and support at-risk students. Additionally, as the VDOE’s Graduation, Drop Out, College, Career, and Civic Readiness (CCCR) tool emphasizes, districts should determine specific staff to track, monitor, and analyze graduation data as part of this comprehensive approach.

Effective alternative pathways share the following broad attributes, in which they:⁴

Lead to a high school diploma awarded from a public school district

Serve students who are high school-aged, or students in pursuit of a high school diploma

Provide students with academic offerings that vary from a traditional school structure

Operate as part of an existing school (e.g., not as a separate school) allowing students to transition into—and out of—academic offerings

Additionally, Figure A (on the following page) offers research-based suggestions for districts and schools to provide alternative pathways to earning a diploma, including taking inventory of available pathways, communicating pathway options and ensuring their accessibility, and partnering with other districts’ organizations to expand students’ options.

Figure A: Recommendations for Offering Alternative Pathways

Map out all of the options available to students in your district.

- One barrier to taking advantage of non-traditional education programming is limited information about what is available. As a first step to creating multiple pathways to a diploma, districts can take inventory of all of their existing options for students, such as alternative education, career/vocational technical education, service learning, dual enrollment, online learning, etc. Included in the list should be the requirements, prerequisites, and/or referral and enrollment practices associated with each program. To maximize the benefit to students, this list should include options that may reside outside the district, such as the local regional vocational technical school district. This exercise will not only broaden students' and families' awareness of their options, but it will also help districts to identify gaps in their programming.

Make information about pathways to a diploma easily accessible.

- Once a district has mapped out its pathway options, this information should be made public and easy to find. Students and their families are the primary audience, but other interested parties—including other districts—should be able to locate the information as well. In addition to posting pathways materials on the district's website, the district should also provide a contact for questions and requests for additional information, and have an outreach strategy to ensure that this information is available for students and their families, school and district leaders, and educators. Districts that have cultivated exemplary non-traditional academic programs should actively seek opportunities to share their knowledge and experience with districts that are seeking to expand their offerings.

Expand options for students through partnerships with other districts, institutions of higher education, and non-profit organizations.

- Rarely can one district's educational options be all things to all students. However, coordinating work on multiple academic options and developing equitable agreements that enable students to venture outside their home district may provide a more comprehensive set of options, as well as help share costs. In addition, the use of data across district lines can improve possibilities for regionalization of services. Current service delivery models in alternative education already exist in Massachusetts based on these principles.

Source: The Rennie Center for Education Research & Policy⁵

The following subsections offer creative solutions for providing students with alternative pathways and options to meet the graduation requirements of a standard diploma in ways that work with their needs and strengths.

Innovative Course Scheduling and Credit Delivery Approaches

One strategy for offering alternative pathways to receive graduation credits is through flexible scheduling and instructional delivery structures.⁶ Alternative scheduling models offer students flexibility to receive credits towards graduation when traditional models prove challenging or do not meet student needs. Scheduling options that allow students to attend classes on the weekend or in the evening enable students with jobs or family responsibilities to still gain credits and meet graduation requirements.⁷ For example, New York City Public Schools offers Young Adult Borough Centers (YABCs), which provide students at-risk of dropping out with flexible credit scheduling options. Specifically, these schools hold classes part-time and in the evening to support students whose responsibilities prevent them from attending school during traditional daytime hours. YABCs serve students at significant risk of not graduating who are between the ages of 17.5 and 21, are in their fifth year of high school, and have earned at least 17 credits. YABCs also offer a "Shared Instruction" evening program, where students attending traditional high schools can take evening classes at a YABC to catch up on credits. Upon completing their remaining credits at the YABC and passing state exams, students graduate with a diploma from their home high school.⁸



**COURSE
SCHEDULING**

In addition to providing courses at alternative times, schools and districts can also offer online courses to help students gain credits and learn essential content at a pace and schedule that works for their needs. Schools can offer online courses as a way for students to recover credits (i.e., due to failed or incomplete courses) or as an option for when traditional courses and schedules do not meet students' needs. For example, commercial online credit recovery programs target course content and individualize instruction for credit recovery purposes.⁹ These courses "tailor learning to individual students, by using flexible pacing and schedules, extra practice, frequent assessment, and robust monitoring and reporting on participation and progress."¹⁰ Using online platforms increases flexibility and efficiency for schools and students. Research in Chicago Public Schools indicates that while face-to-face credit recovery may have short-term benefits over online credit recovery, "there were no differences between online and face-to-face Algebra I credit recovery in end-of-high school outcomes," including math credits and graduation rate.¹¹ Students can complete online courses either during the school day in a school-based lab, or at home on their own time.¹²

**ONLINE
LEARNING**

For example, in Michigan, students have the flexibility to earn credits online rather than in traditional, seat-based face-to-face instruction. Students in Grades 5-12 may take up to two courses online per year, while districts must receive a waiver from the state to provide instruction either fully online or through blended learning that combines face-to-face with online learning. Online schooling can offer more flexibility for students who may find traditional school schedules challenging due to personal and family responsibilities and jobs.¹³

Furthermore, districts may also consider options for providing students credit for work experience, thus allowing students who must hold a job to support their families to still progress towards graduation. Ideally, students receive credit for work-based learning that connects to academic content and the student's future goals.¹⁴ For example, the Arts & Technology High School in Wilsonville, Oregon, offers a "Work Experience" opportunity for students to earn credit while working outside of school. Students earn half a credit for 90 hours of document work in any paid position where they learn academic or career-related skills, and can earn up to two credits total. The process for qualifying for, completing, and presenting a Work Experience includes:¹⁵

**WORK
CREDIT**

- Initial meeting with student and ATHS Counselor or Principal;
- Student completes Work Experience credit application;
- The employer is contacted by school staff to verify employment;
- Student turns in work hours each month to the ATHS staff (Copy of W-2 showing hours or timesheet);
- When a student has logged 90 hours, the employer is contacted to complete a student evaluation;
- ATHS staff reviews evaluation with the student;
- The student prepares for presentation (updates resume, written reflection); and
- Student presentation to ATHS staff.

For example, [click here to access Kansas' work-based learning continuum and guide.](#)

A review of alternative pathways to earn a high school diploma in Massachusetts highlights four schools that offer students options to earn credits towards graduation that vary from traditional instructional models, combine flexible scheduling, online learning, and credit for work experiences with "standards-based instruction that is customized to students' learning styles and responsive to students' needs and/or interests."¹⁶ Figure B (on the following page) presents the alternative instructional delivery scheduling models and applied learning opportunities each school offers as part of a comprehensive approach including academic remediation and supports, non-academic

supports and services, transitional support, transportation, and additional school staff and administrators in addition to flexible academic instruction and applied learning opportunities.¹⁷

Figure B: Sample Alternative Scheduling and Applied Learning Models in Four Massachusetts Schools

SCHOOL NAME	ACADEMIC INSTRUCTION DELIVERY	APPLIED LEARNING OPPORTUNITIES
Creamer Center	<ul style="list-style-type: none"> Day program: Classroom-based academic instruction Evening program: Classroom-based academic instruction Credit recovery program for 9th and 10th graders 	<ul style="list-style-type: none"> Summer work opportunities for students
Gateway to College Program at Massasoit Community College	<ul style="list-style-type: none"> Classroom-based academic instruction Summer Session 	<ul style="list-style-type: none"> Community service/ internship requirement (40 hours)
Drury High School Learning Lab	<ul style="list-style-type: none"> Online, standards-based coursework on a wide array of topics that is supported via one licensed teacher and one paraprofessional 	<ul style="list-style-type: none"> Support via Drury High School's internship coordinator
CTE at Somerville High School	<ul style="list-style-type: none"> Classroom-based academic instruction provided as part of the comprehensive high school CTE students use electives to engage in vocational coursework aligned with the Chapter 74 framework 	<ul style="list-style-type: none"> Internships with local employers Community projects with local community-based organizations A co-operative education program that provides students with paid work opportunities

Source: The Rennie Center for Education Research & Policy¹⁸

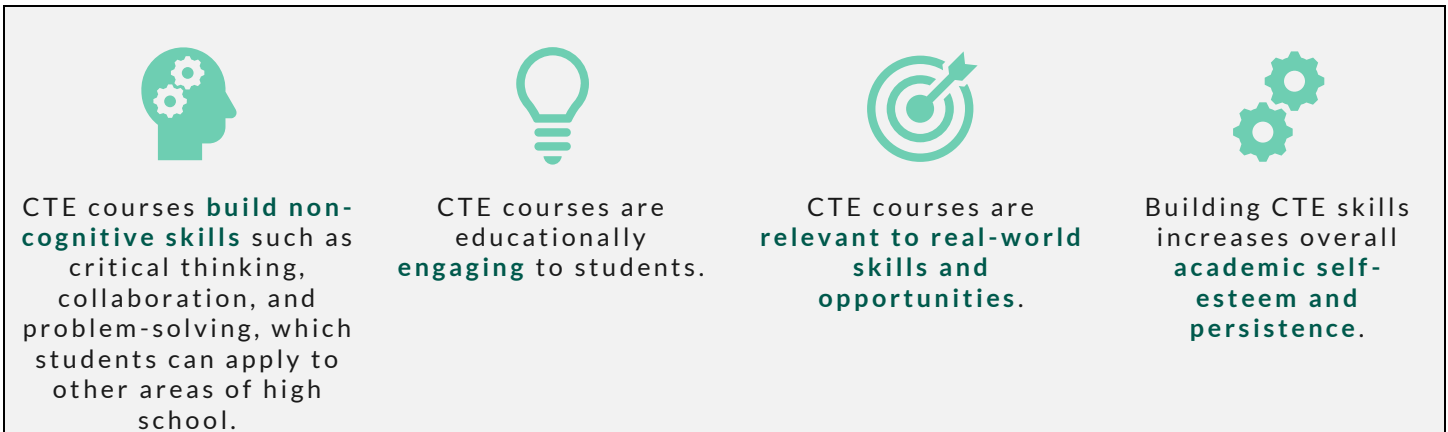
Engaging Students through CTE

Districts and schools can effectively motivate students to graduate and decrease a student's chances of dropping out of high school by offering CTE pathways.¹⁹ The Association for Career and Technical Education (ACTE) emphasizes that in comparison to the national average graduation rate of 80 percent, the graduation rate for students who concentrate in CTE programs is 93 percent.²⁰ CTE pathways can improve graduation rates by motivating and engaging students in real-world content in courses that enable students to meet graduation requirements and offer skills that translate to relevant careers.

CTE programs can engage disengaged students at risk of dropping out through hands-on, relevant content that "inspire[s] them to return to the classroom."²¹ Indeed, "As CTE courses focus on the link between traditional content and its career-based applications, school material has the potential to become more engaging through hands-on experiences and applied contextual learning."²² Through comprehensive CTE pathways and options, students will be able to see how participating in school contributes to job-ready skills once they graduate by actively learning skills they can readily use on the job.²³ Figure C (on the following page) presents reasons why participating in CTE courses can engage students who may otherwise be at risk of dropping out.

The Virginia Department of Education provides school leaders with a Graduation, Drop Out, CCCR Tool that includes "utilize[ing] student academic and career plan data to provide opportunities in advanced coursework, completion of CTE credential, work-based learning experiences, and service learning experiences," in addition to creating monitoring reports.

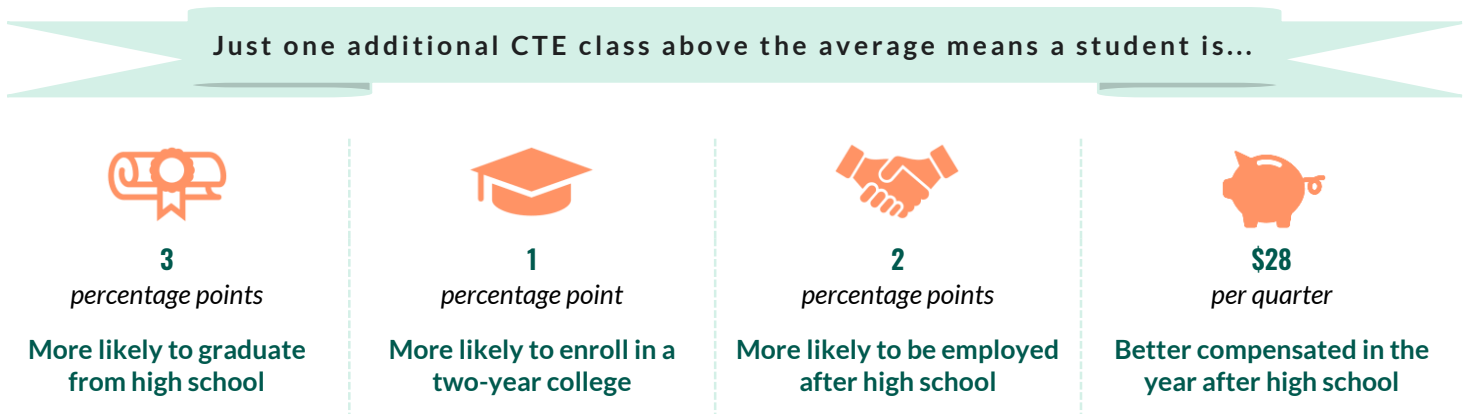
Figure C: How CTE Participation Improves Student Outcomes



Source: *American Educational Research Journal*²⁴

Recent studies show that CTE participation improves a student's chances of graduating, both overall and on-time, and reduces a student's chances of dropping out of high school.²⁵ A 2016 study of CTE in Arkansas with over 100,000 students found that students with more exposure to CTE courses were more likely to graduate from high school (by 21 percentage points), enroll in a two-year college, gain employment, and have higher wages compared to otherwise similar students.²⁶ The study also indicates that the benefits of CTE courses are cumulative, where the more courses a student takes, the greater the academic outcomes. Figure D presents the benefits that students in Arkansas who take one CTE course above the average (4.9 courses) achieve.

Figure D: Impacts of Additional CTE Course Above Average



Source: Dougherty²⁷

Research also indicates that high school CTE benefits low-income students in particular, with the Arkansas study finding that low-income students with a CTE concentration (i.e., taking a sequence of three or more courses in an occupationally aligned "program of study") were "25 percentage points more likely to graduate than low-income non-concentrators, while higher-income concentrators are only 17 percentage points more likely to graduate than their non-concentrator peers."²⁸

In addition to promoting career exploration and planning prior to and in the early high school grades, districts can discourage students from dropping out of high school by offering and enrolling students in CTE courses in their junior and senior years. A 2018 study using data from the Educational Longitudinal Study found significantly, taking CTE courses in high school is statistically associated with lower chances of high school dropout and higher chances of on-time graduation. Furthermore,

the study found that the timing of CTE courses affects a student's chances of graduating, where taking a greater number of CTE courses in Grades 11 and 12 substantially correlates with a lower chance of dropping out.²⁹

One strategy for providing students with greater access to CTE is through virtual and augmented reality.³⁰ "When CTE programs embrace these as part of the teaching and learning process, students are not only more engaged and motivated, but are also directly exposed to training that will set them on the path to job and career success."³¹ Virtual reality CTE uses special virtual reality glasses or a head-mounted display to immerse students in the learning experience, while augmented reality CTE provides an interactive learning experience through digital content. Accordingly, "while not meant to be a substitute for working with real materials, a virtual environment gives students hands-on practice with a skill or technique until they feel confident and comfortable performing it."³² In areas without access to CTE labs, materials, or work sites, virtual and augmented reality increase student access to skills and experiences that contribute to future careers. Notably, CTE programs that effectively integrate virtual and augmented reality to engage students use active and project-based learning, emphasize authentic learning experiences, teach skills relevant to in-demand jobs and careers, and engage the local business community.³³

As CTE can effectively motivate students to stay in school and graduate, districts should establish policies, pathways, and courses that enable students to meet graduation requirements through CTE classes. Additionally, CTE programs should offer industry-recognized credentials and encourage students to concentrate in a particular field or pathway.³⁴




[Click here to see the process district leaders in Michigan use to determine course credits for CTE courses.](#)








As the VDOE's Graduation, Drop Out, CCCR tool emphasizes data collection and analysis, districts should also collect CTE data and analyze how CTE participation may impact credits earned, graduation rates, and the GCI. District data teams can also use this data to identify barriers to student CTE participation and credit-earning.

Supplemental Resources

The following resources provide additional information on effective strategies and procedures for district and school leaders to create alternative options for meeting graduation requirements beyond those already included in this info-brief.

Figure G: Resources on Data Analysis and Assessment

RESOURCE	PUBLISHER	SHORTENED URL	QR CODE
"Across the Stage: Doing What it Takes to Help Every Student Graduate from High School" ³⁵	American Federation of Teachers	https://qr.go.page.link/RbKxe	
"Multiple Pathways to Student Success" ³⁶	California Department of Education	https://qr.go.page.link/H3mCE	
"About the Linked Learning Approach" ³⁷	Linked Learning Alliance	https://qr.go.page.link/Q7G92	

RESOURCE	PUBLISHER	SHORTENED URL	QR CODE
"Increase Opportunity for Student Success through Multiple Pathways to Graduation" ³⁸	Aurora Institute	https://qr.go.page.link/BX8Rx	
"Building Multiple Pathways to a High School Diploma: A Cost Study of Non-Traditional Academic Options" ³⁹	The Rennie Center for Education Research & Policy	https://qr.go.page.link/pFp22	
"Credit Recovery" ⁴⁰	Education Partnerships, Inc.	https://qr.go.page.link/ZkYgA	
"Online Credit Recovery: Benefits and Challenges" ⁴¹	NCPEA Education Leadership Review of Doctoral Research	https://qr.go.page.link/WNRfC	
"CTE Pathway Option for a Standard High School Diploma" ⁴²	Florida Department of Education	https://qr.go.page.link/3JMFs	
"Building Effective Data Strategies in Career and Technical Education" ⁴³	MDRC	https://qr.go.page.link/HS3Sh	
"Dropout Prevention Gives Students Reason to Stay" ⁴⁴	District Administration	https://qr.go.page.link/CkXYZ	

Source: QR Code Generator⁴⁵

Endnotes

- ¹ "Building Multiple Pathways to a High School Diploma: A Cost Study of Non-Traditional Academic Options." The Rennie Center for Education Research & Policy. p. 13.
<http://expandingopportunity.org/reports/MultiplePathways.pdf>
- ² Churchill, A. and J. Poiner. "Ohio's Alternative Graduation Routes: The Soft Bigotry of Low Expectations Rears Its Ugly Head." The Thomas B. Fordham Institute, March 21, 2019.
<https://fordhaminstitute.org/ohio/commentary/ohios-alternative-graduation-routes-soft-bigotry-low-expectations-rears-its-ugly>
- ³ "15 Effective Strategies for Dropout Prevention." National Dropout Prevention Center.
http://dropoutprevention.org/wp-content/uploads/2018/03/NDPC_15_effective_strategies.pdf
- ⁴ Figure contents quoted verbatim from: "Building Multiple Pathways to a High School Diploma: A Cost Study of Non-Traditional Academic Options," Op. cit., p. 3.
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<https://www.edutopia.org/student-dropout-retention-strategies>
- ⁸ [1] "Additional Ways to Graduate: High School Diploma and Equivalency Programs." NYC Department of Education, 2017. p. iii. <https://www.schools.nyc.gov/docs/default-source/default-document-library/other-ways-to-graduate-english> [2] "Young Adult Borough Centers." NYC Department of Education.
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- ⁹ Trotter, A. "Online Options for 'Credit Recovery' Widen." *Education Week*, May 21, 2008. p. 1.
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- ¹² Johnston, H. "Credit Recovery." Education Partnerships, Inc.
<https://oregongearup.org/sites/oregongearup.org/files/research-briefs/creditrecovery.pdf>
- ¹³ "Flexible Learning Options." Michigan Department of Education. p. 1.
[https://www.house.mi.gov/hfa/PDF/SchoolAid/SchAid_MDE_subcmte_Testimony\(FlexibleLearningDocument_2-28-17\).pdf](https://www.house.mi.gov/hfa/PDF/SchoolAid/SchAid_MDE_subcmte_Testimony(FlexibleLearningDocument_2-28-17).pdf)
- ¹⁴ "Building Multiple Pathways to a High School Diploma: A Cost Study of Non-Traditional Academic Options," Op. cit., p. 5.
- ¹⁵ Bullet points quoted verbatim from: "Work Experience Credit / How It Works." West Linn-Wilsonville School District. <http%3A%2F%2Fwww.wlww.k12.or.us%2Fsite%2Fdefault.aspx%3FDomainID%3D564>
- ¹⁶ "Building Multiple Pathways to a High School Diploma: A Cost Study of Non-Traditional Academic Options," Op. cit., p. 4.
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- ¹⁸ Figure contents quoted verbatim from: Ibid., pp. 7–8.
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<https://fordhaminstitute.org/sites/default/files/publication/pdfs/20160407-career-and-technical-education-high-school.pdf> [2] Gottfried, M.A. and J.S. Plasman. "Linking the Timing of Career and Technical Education Course-taking With High School Dropout and College-Going Behavior." *American Educational Research Journal*, 55:2, April 1, 2018. <https://doi.org/10.3102/0002831217734805> [3] "About CTE." ACTE.
<https://www.acteonline.org/about-cte/>
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- ²³ [1] Parlier, Op. cit. [2] Dougherty, Op. cit., p. 1.
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[2] Dougherty, Op. cit., p. 2. [3] Gottfried and Plasman, Op. cit.

²⁶ Dougherty, Op. cit., p. 2.

²⁷ Figure reproduced verbatim from: Ibid., p. 23.

²⁸ Ibid., p. 6.

²⁹ Gottfried and Plasman, Op. cit.

³⁰ Parlier, Op. cit.

³¹ Ibid.

³² Ibid.

³³ Ibid.

³⁴ Dougherty, Op. cit., p. 6.

³⁵ "Across the Stage: Doing What It Takes to Help Every Student Graduate from High School." American Federation of Teachers. https://www.aft.org/sites/default/files/if_acrossthestagegradsupportmanualace.pdf

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³⁷ "About the Linked Learning Approach." Linked Learning Alliance. <https://www.linkedlearning.org/about/linked-learning-approach>

³⁸ Frost, D. "Increase Opportunity for Student Success through Multiple Pathways to Graduation." Aurora Institute, April 26, 2016. <https://aurora-institute.org/blog/increase-opportunity-for-student-success-through-multiple-pathways-to-graduation/>

³⁹ "Building Multiple Pathways to a High School Diploma: A Cost Study of Non-Traditional Academic Options," Op. cit.

⁴⁰ Johnston, Op. cit.

⁴¹ Pettyjohn, T. and J. LaFrance. "Online Credit Recovery: Benefits and Challenges." *NCPEA Education Leadership Review of Doctoral Research*, 1:1, March 2014. <https://files.eric.ed.gov/fulltext/EJ1105728.pdf>

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