



Supporting the Transition from Middle School to High School

A key element of improving graduation rates and preparing students for college and career

Michelle Rutherford

Director of Implementation Success, Apex Learning

January 2018





Table of Contents

03	College and career readiness begins in middle school
03	Navigating the transition from middle school to high school
06	Ensure middle school students are really ready for high school
08	Help middle school students make the transition
10	Set middle school students up for success
10	About the author
11	Sponsored by Apex Learning
11	References

College and Career Readiness Begins in Middle School

The path to graduation and post-secondary success begins in middle school.

Middle school academic performance is a key predictor of success in ninth grade, where course completion is the most accurate predictor of graduation. Students earning credit for at least five courses and receiving no more than one failing semester grade in a course¹ by the end of ninth grade are four times more likely to graduate than peers who do not achieve these milestones.²

The middle school years lay a foundation for success in high school, college, and career. Unfortunately, many students leave middle school underprepared for the rigors of high school work. This lack of readiness, combined with the socio-emotional changes students experience during this time, has a major impact on high school and post-secondary success.

- Ninth graders have the lowest grade point average, the most missed classes, and more behavior referrals compared to other high school grade levels.³
- Approximately 22 percent of students repeat a ninth-grade course.⁴
- More students fail ninth grade than any other grade in high school.⁵
- Students who fail ninth grade are at a high risk of dropping out.⁶
- One-third of high school dropouts never made it beyond the ninth grade.⁷

Weak foundational skills and gaps in prerequisite concepts make accessing grade-level learning targets difficult, and often leads to course failure, which places students at risk of dropping out. Educators can take steps to support struggling students as soon as they are identified.

How can districts prepare students for high school and support students who enter high school underprepared?

Navigating the Transition from Middle School to High School

Middle school promotion and state exam passage does not ensure a student is prepared for the next grade level. Students who have not fully mastered the standards start ninth grade at a disadvantage — in more ways than one. Personalized intervention and adaptive remediation is required to increase the prerequisite concept mastery necessary to access grade-level instruction.

Case Study: Middle School Teaching and Learning to Build Readiness

Dorchester School District Two takes a comprehensive approach to preparing middle school students for the academic rigor and social challenges of high school. Rather than simply sending eighth graders off to high school and hoping for the best, the district has put in place the structure and tools to ensure students have the foundational skills and knowledge they need to succeed and graduate.

Improving Articulation Between Eighth and Ninth Grade

Preparing students for high school is a process for both students and teachers. For middle school teachers to prepare students for the challenges that lie ahead, they must be familiar with the ninth-grade curriculum so they understand what skills students need to master and the level of rigor they will face. In turn, ninth-grade teachers can better support incoming freshman if they have a clear understanding of what students are expected to learn from the eighth-grade curriculum. Professional development has been a key component in bridging this gap, providing teachers with best practices and opportunities to collaborate and share information. Middle school and high school teachers observe each other's classrooms, discuss how middle school standards feed into high school standards, and work together to support students during the critical transition from middle school to high school.

Providing Key Skills for Success

The district recognizes that students need to build not only academic skills but also often overlooked soft skills such as perseverance and self-direction. Successfully transitioning to high school means students must become engaged learners with a growth mindset. Eighth graders build learning skills with Apex Learning math and ELA digital curriculum that foster independent learning, support differentiated practice, and develop the higher order thinking skills necessary for success in high school.

"Kids finishing eighth grade aren't much different from kids starting ninth grade — we still need to be explicit in laying out expectations for them. Some kids are more advanced than others and can make the transition easily versus others that need more support and lots of affirmation."

- **Kelly Purvis**, Middle School Curriculum Coordinator, Dorchester School District Two

Comparison Chart: Comparing Middle School and High School Teaching and Learning		
	Middle School Teaching and Learning	High School Teaching and Learning
Academic subjects	<ul style="list-style-type: none"> • Broad and generic courses (Science, Social Studies) • Limited class choices • Students might be put in different groups based on skill level, but in general, there's little variation in the courses • Emphasizes on passing the grade 	<ul style="list-style-type: none"> • More specific courses (Biology, Geometry, American History) • More class choices, electives, and extra-curricular choices (sports, drama, etc.) • Emphasis is on passing the course
Student teacher interaction	<ul style="list-style-type: none"> • More teachers support and involvement • More teacher-directed time management 	<ul style="list-style-type: none"> • Limited teacher-directed support with time and schedule management; students are expected to be more independent
Environment	<ul style="list-style-type: none"> • Smaller class sizes • More personal time with a teacher • Fewer class periods • Potentially a more flexible schedule or team-teaching 	<ul style="list-style-type: none"> • Larger class sizes • Less one-on-one interaction with a teacher; students are expected to be more independent • More class periods
Work load	<ul style="list-style-type: none"> • Less homework • Perhaps more projects 	<ul style="list-style-type: none"> • Larger workload • More classes mean more homework • Extra-curriculars may take up more time
Focus	<ul style="list-style-type: none"> • Focus on high school preparedness both socially and academically • Grades do not have long-term impacts 	<ul style="list-style-type: none"> • Focus on college- and career-readiness • Grades have impact on post-high school choices

Help Students Manage the Move

Instruction that effectively prepares students for high school does not approach all students in the same way. When school leaders consider students as individuals, they can foster an environment that enables students to learn in a variety of ways and paces. Many students have missed critical information in middle school and have failed to develop important readiness skills prior to entering the ninth grade. These weak foundations, unaddressed, become large gaps that widen as students advance grade levels.

Case Study: Improving High School Readiness Among At-Risk Middle School Students

The Challenge

Illinois has a strict policy for students advancing from middle school to high school. All students in the state must pass all subjects before moving on to the ninth grade. Reagan Middle School (RMS) in the Dixon School District in Illinois, takes these requirements seriously.

Middle school and high school educators communicate openly and often about the skills students need to successfully transition. Educators also expose students to ninth-grade course expectations, including the classes they'll be required to take and the styles of instruction. RMS evaluates and adjusts curriculum and assessment regularly to help ease the transition to high school.

Despite thorough preparation and planning, RMS educators struggled to support at-risk students who couldn't come to class regularly due to emotional or physical health issues, or other situations that impacted attendance.

The Solution

RMS now uses a rigorous and effective digital curriculum to provide remediation and learning opportunities to at-risk students with the goal of filling in knowledge gaps and getting them on track in flexible environments. Apex Learning curriculum has proven to be:

1. Flexible — allowing students to learn at their own pace and in settings conducive to their needs, in and out of school.
2. Rigorous — supporting learning and mastery of grade-level standards through formative feedback, scaffolds, and support to make rigorous concepts accessible.
3. Engaging — through relevant, relatable examples with active learning elements to motivate and keep students learning.
4. Effective — helping students learn and advance to ninth grade prepared for high school coursework.

“Once students get involved in courses and engaged with activities, they are successful in completing requirements.”

- **Andy Bullock**, Principal, Reagan Middle School, Dixon School District

Ensure Middle School Students are Really Ready for High School

Readiness is more than academic. It also involves fostering Really Ready skills. Many districts and schools create meaningful learning experiences targeted to these skills early on: critical thinking, communication, social and emotional skills, self-directed learning, and a growth mindset. The Really Ready skills that prepare students for college and career also make them better equipped to manage the transition from middle school to high school.

Skills of a Really Ready Student⁸

Think critically and solve complex problems.*

Students apply tools and techniques gleaned from core subjects to formulate and solve problems. These tools include data analysis, statistical reasoning, and scientific inquiry, as well as creative problem solving, nonlinear thinking, and persistence.

Communicate effectively.*

Students clearly organize their data, findings, and thoughts in both written and oral communication. Students are able to articulate their ideas through public performances and presentations, both online and in-person.

Be self-directed.*

Students monitor and direct their own learning. They are able to learn how to learn and take on projects and tasks on their own. Students are able to manage their learning and create processes to help them accomplish their goals and work.

Have a growth mindset.**

Students believe that their most basic abilities can be developed through dedication and hard work. Students develop positive attitudes and beliefs about themselves as learners that increase their academic perseverance and prompt them to engage in productive academic behaviors.

Develop social and emotional skills.***

Students understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

Many students, having barely met the minimum requirements necessary to progress out of middle school, enter ninth grade with significant learning gaps. These students are unable to access grade-level concepts, causing learning gaps to widen. The effects can be devastating to a student, impacting:

- Engagement and Motivation: Students who experience early, reinforcing patterns of failure may become frustrated and lose hope of graduating. If students fail to see a payoff for hard work, they may disengage and lose the motivation to work hard.
- Exam Performance and Graduation Rates: Experiencing failure during ninth grade impacts long-term success. Without effective intervention, students fall further behind, leading to poor performance on highstakes exams and a lower likelihood of graduation.

*Skills adapted or directly from Deeper Learning for Every Student Every Day

**Growth mindset based on the work of Carol Dweck

***Social and emotional skills definition from CASEL

Results from the National Assessment of Educational Progress (NAEP), a gold standard for measuring working knowledge and in-depth subject knowledge, indicate that most students are entering ninth grade unprepared for the rigors of high school level coursework.⁹ In particular, eighth-grade students are struggling with Algebra I and English.

- Only 34 percent of eighth-grade students performed at or above proficient in 2017 NAEP mathematics assessments.
- Only 36 percent of eighth-grade students performed at or above proficient in 2017 NAEP reading assessments

These NAEP scores are particularly troubling considering that success in Algebra I and English I are key indicators of future graduation. Though NAEP data shows some progress toward proficiency over the last three decades in mathematics and reading, this progress isn't occurring fast enough.

When ninth-grade students enter high school without the knowledge and skills needed to master their coursework, they are at a greater risk of falling behind and dropping out. Keeping students working at grade level in middle school is critical to the foundation of success for ninth grade and beyond. Teaching below grade-level standards in middle school, without taking necessary steps to remediate learning gaps, sets students up for failure. Teaching grade-level standards and providing effective intervention and support enables students to get back on track for high school, college, and career success.

Help Middle School Students Make the Transition

Educators can proactively remediate learning gaps — before ninth grade. Strengthening weak foundations and closing gaps in prerequisite skills will help students: successfully transition from middle school to high school; access grade-level content in key courses; and set a course for graduation and college- and career-readiness.

Teachers need access to effective digital curriculum with built-in assessment tools to identify students in need of intervention, and to instructional tools to provide targeted instruction to get those students back on grade level. Differentiation is a challenge for teachers tasked with meeting rigorous academic standards in classrooms with increasingly diverse student populations. Personalized learning programs supported by digital curriculum can help teachers meet diverse student learning needs.

Effective digital curriculum makes rigorous standards accessible to all students — from high-achieving to struggling — by providing a system of support that prepares students for success. An effective digital curriculum that prepares students for high school coursework includes:

- Age-appropriate design to support learning with age-appropriate scenarios and examples.
- Active learning to ensure learners are engaged, and to meet needs for variety, context, and control over path, place, and pace
- Adaptive remediation to create personalized learning plans that offer instruction and practice in areas that need support, including elementary school-level concepts.
- Prescriptive assessment to identify individual mastery of prerequisite and grade-level skills and concepts.

- Systems of support to close achievement gaps, including:
 - Scaffolds and supports to make content more accessible, and improve learner capacity by building on prior knowledge
 - Varied instruction to learn concepts and skills in different ways and through different media
 - Relevant learning through real-world examples, scenarios, and problems
 - Formative assessment to provide immediate feedback to confirm students' understanding, and guides the learner when answers are incorrect
 - Actionable data to enable progress and monitoring, and inform whole-class, small-group, and individual instruction

Case Study: Targeting High School Readiness with Digital Curriculum

The Challenge

Beaverton School District actively seeks to empower its middle school teachers to be as effective as possible. Teachers are given ambitious annual Student Growth Goals and are tasked with meeting diverse student needs to ensure that all students are performing at grade level and prepared for their next course.

Paul Ottum, Online Learning Specialist at Beaverton School District (BSD) in Oregon, understood that to support the transition from middle school to high school, the district needed to:

1. Identify struggling students early in middle school and provide immediate intervention
2. Help middle school students master grade-level content.

The Solution

BSD created a program for seventh-and eighth-grade students leveraging effective digital curriculum within the core instruction to identify and target knowledge and skill gaps, and to inform adjustments to instructional approaches. Teachers use real-time data to take the pulse of their classrooms and determine whether students are grasping a concept. Students can access their performance data and receive formative feedback, engaging them in learning and motivating them to meet learning goals.

As students receive personalized support, their confidence builds and achievement increases. Today, these students are performing at or above grade level and are passing courses on time, prepared for high school. Since the district implemented Apex Learning Adaptive Tutorials, Beaverton students are visibly taking responsibility for their own learning and achieving at higher levels.

“Tutorials enable teachers to offer each student personalized support and just-in-time remediation, which is precisely what middle school students need.”

- **Paul Ottum**, Online Learning Specialist, Beaverton School District

Set Middle School Students Up for Success

Taking steps to remediate learning gaps after the ninth grade is often too late. Weak foundations and gaps in prerequisite skills often leads to course failure and to an increased risk of falling behind and dropping out. Providing educators with the tools to support personalization, standards-based assessment, and targeted learning plans can ensure that students are prepared for the next course, the next grade level, and the next step toward college and career.

About the Author

Michelle Rutherford

Director of Implementation Success, Apex Learning

Michelle leads a team of Implementation Success Managers who work with districts across the nation to maximize student outcomes. Michelle is focused on identifying and sharing effective implementation models and best practices for personalized learning programs. She also designs services to plan and evaluate personalized learning programs, and to support the development of specific skills and strategies for teaching with a digital curriculum. Prior to joining Apex Learning, Michelle served as an Instructional Technology Interventionist and Blended Learning Program Coordinator in South Carolina. Michelle began her career in education as a biology teacher in 2001. She holds an undergraduate degree in secondary science education from the University of North Florida, and a master's degree in educational technology from Lesley University. She also attained National Board Certification (AYA Biology). Michelle presents personalized learning models and best practices at district, state, and national conferences.

References

- ¹ Allensworth E. & Easton J.Q. (2005). The On-Track Indicator as a Predictor of High School Graduation. The University of Chicago Consortium on School Research. Retrieved from <https://consortium.uchicago.edu/publications/track-indicator-predictor-high-school-graduation>
- ² (2014). Preventable Failure: Improvements in Long-Term Outcomes when High Schools Focused on the Ninth Grade Year. The University of Chicago Consortium on School Research. Retrieved from <https://consortium.uchicago.edu/sites/default/files/publications/On-Track%20Validation%20RS.pdf>
- ³ (2010). The Importance of the Ninth Grade on High School Graduation Rates and Student Success. Education Digest. Retrieved from <https://eric.ed.gov/?id=EJ903523>
- ⁴ (2010). The Importance of the Ninth Grade on High School Graduation Rates and Student Success. Education Digest. Retrieved from <https://eric.ed.gov/?id=EJ903523>
- ⁵ (2008). Developing Early Warning Systems to Identify Potential High School Dropouts. National High School Center. Retrieved from <https://eric.ed.gov/?id=ED521558>
- ⁶ (2008). Developing Early Warning Systems to Identify Potential High School Dropouts. National High School Center. Retrieved from <https://eric.ed.gov/?id=ED521558>
- ⁷ (2015). Factors Influencing High School Graduation. Washington Student Achievement Council. Retrieved from <http://www.wsac.wa.gov/sites/default/files/2015.12.3.Ritter.Graduation.Issue.Brief.pdf>
- ⁸ 28 Skills of a Really Ready Student. Apex Learning. Retrieved from <https://cdn.apexlearning.com/al/28-Skills-of-a-Really-Ready-Student-2.pdf>
- ⁹ The Nation's Report Card. Retrieved from https://www.nationsreportcard.gov/reading_math_2017_highlights/



Where opportunity thrives™

An industry leader with deep expertise in digital curriculum, Apex Learning works closely with school districts across the country to implement proven solutions that increase on-time graduation rates and create opportunities for student success in school and beyond. The company is driven by the understanding that supporting the needs of all students – from struggling to accelerated – strengthens schools and creates stronger communities, brighter futures and a more equitable world. Apex Learning is accredited by AdvancED and its courses are approved for National Collegiate Athletic Association eligibility. Apex Learning, where opportunity thrives. For more information, visit <http://www.apexlearning.com>.

Contact

Apex Learning

1215 Fourth Ave., Suite 1500
Seattle, WA 98161
Phone: 1 (206) 381-5600
Fax: 1 (206) 381-5601
ApexLearning.com