

TOMORROW'S HIGH SCHOOL

Creating Student Pathways for Both College and Career

Future Proofing Students for Middle-Class Earning Opportunities

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District Set **Bold Goals** with measurement indicators for middle grades and high school (Chapter 1, P. 13)

- Graduate high school 95% with 90% graduating college ready, career ready or both having mastered powerful literacy and math standards.
- At least 80% earn a credential or degree of value by age 25.
- At least 70% enter ninth grade with demonstrated literacy skills needed to read, analyze and comprehend a range of text.
- At least 70% enter ninth grade having completed CP Algebra I or demonstrated readiness for Algebra I.

Review and Modify the Key Elements of the Design Features.

Chapter 2, Pages 25-26

- 3 or 4 courses in either a career **FOCUS** or academic **FOCUS**
- 4 math credits – STEM focus, 2 math credits beyond Algebra II – non-STEM focus pathways will require Algebra I, geometry , plus 2 math credits related to the focus
- 4 credits in college-preparatory/honors English
- 4 credits in college-preparatory lab science
- At least 3 social studies credits
- Meet computer science, information technology and digital fluency standards

Questions to Ponder

- How do you know which courses are truly taught to college- and career-readiness standards?
- Which sequence of courses – **Advanced Placement, Honors, or General Study Courses** – would you want your child or grandchild to take that would increase their chances of meeting the state’s readiness standards for college and careers.
- How would you expand access to “True College-Readiness Classes?” The Dallas Texas story
- What criteria would you set for CAREER PATHWAY COURSES to be considered as HONORS CLASSES. See criteria on P. 76 and an example of an assignment on P. 77.

ASSIGNMENTS MATTER: Students learn more when:

1. They are engaged in rigorous assignments that require them to think, analyze, do background research, synthesize information and produce a product demonstrating their learning.
2. They are engaged in **relevant learning experiences** that are connected to familiar contexts and involve complex problems important to achieving their personal goals.
3. They have a **personal relationship** with adults who see them as worthy and who care about and persist in helping them master complex learning tasks.
4. They have **opportunities to interact with peers in small groups to complete open-ended, challenging assignments that enable them** to learn from others and to contribute to the learning of others.
5. They **take greater responsibility for and ownership of their own learning when they believe the content they are being asked** to master is important to them, and when the task allows them some autonomy in selecting methods for completing the assignment.
6. They keep a **weekly journal** in each class on major learnings and identify gaps in their learning they need to address.
7. They are given **relearning assignments** until they have mastered content and standards at a B level grade



How can the district support career pathway/CTE teachers to design project-based assignments that are:

- Intellectually demanding?
- Aligned to labor market requirements?
- Engaging students to use literacy, math, science, technology skills, higher-level cognitive skills and teamwork to complete assignments?

Criteria For Designing Powerful Assignments In CTE Classes That Advance Students' Readiness


- **Researching, analyzing, planning, and evaluating**
- **Technical knowledge and skills, work-related technology, working in teams and independently**
- **Self-reflection on personal career and educational goals**
- **Academic readiness for careers and postsecondary studies**
- **See P. 76 for criteria for powerful assignments and P. 77 for an example of an assignment**
- **See Pages 79-88 for 10 steps to complete such assignments.**

See *Tomorrow's High School*, Page 76 for a detailed set of criteria for designing a project-based assignment and Pages 77-78 for a description of a ninth-grade project from an advanced manufacturing course and a list of the mix of knowledge and skills needed to be applied to complete the project. Also see Appendix C for a template for planning a powerful project-based assignment. (www.ascd.org/CareerTechEdTools)

Why Support CTE Teachers in Designing Assignments That Engage Students in Using a Mix of Technical, Academic, Problem-Solving, Personal and Interpersonal Skills to Complete Assignments?

Chapter 4, P. 71

Because it is the second most powerful practice for advancing students' readiness for college and careers.




How can districts support teachers in designing and using literacy-based assignments to both advance students' literacy skills and their mastery of academic and technical content?


Examples of Literacy-Based Prompt Assignments

From a health science career class

- **Example 1:** Write an essay explaining the stages of life and the aging process.
- **Example 2:** After researching informational text on human growth from conception to death, write a brochure for a target audience in which you define life stages and explain key changes throughout the aging process. Support your discussion with evidence from the text(s). What conclusions or implications can you draw?



How can the school district support middle and high school math teachers to implement powerful mathematical practices that can promote a balance of factual, procedural and conceptual knowledge of mathematics?

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- What impact do powerful mathematics assignments have on students' readiness for high school, college and careers? See vignettes on Pages 96, 97, 98, 99, 100, 101.
 - Changes in students' perceptions and achievement. See Pages 102, 103.

Source for 100 Formative Assessment Math Lessons

www.map.mathshell.org

100 math lessons in total, 20 at each grade level (6-8) and 40 career- and college-readiness for high school. Lessons focus on developing math concepts and solving nonroutine problems. See www.map.mathshell.org.

Examples:

- **Grade 6: Using space efficiently: packing a truck**
- **Grade 7: Drawn to scale: A garden**
- **Grade 8: Comparing fuel consumption: Buying a car**
- **High School:**
 - Building and solving complex equations.
 - Modeling population growth: Having kittens.
 - Transforming 2D figures.

Ways district can support school action teams to:

- Improve successful transitions into high school.
See Pages 64, 65.
- Rethink the senior year.
- Empower counselors and teachers to assist students to find their path to success.
- Base school and classroom practices on key beliefs for preparing all students to graduate high school college ready, career ready or both.

Why Work With Middle School Leaders and Teachers to Align Courses and Assignments to High School Readiness Standards at Least in Literacy and Math?

Ch. 9, Pages 137- 139

- **Many middle schools sort some students into classes with low expectations, with assignments that fail to engage them in higher-level learning needed to succeed in a true **College Preparatory Academic Core** in high school.**

See Chapter 1, Page 13 of Book for Bold Goals.

Review Actions for Successful Transition to High School

- Identify if-then transformative action statements on Pages 138-139 that would have the greatest impact on meeting high school readiness goals in literacy and mathematics.
- Review which practical action steps schools can take NOW, P. 139.

How can the district support school action teams to rethink the senior year as a launching pad to provide:

- **Ready students' access to 30 semester hours of postsecondary credit.**
- **Students approaching readiness – use the senior year to get them college and career ready.**
- **Students performing well below readiness benchmarks – develop a personalized plan to prepare them for their next step.**

Why Rethink the Senior Year?


Senior year is the last chance to prepare students for college and for careers.

- What percentage of your graduates meet college academic standards?
- What percentage of current graduates perform at the Gold and Platinum level on the ACT Work Keys National Career Readiness Certificate?
- What percentage of your graduates (**by age 25**) have earned a BS degree, an associate degree, or an advanced certification in a career field leading to a middle-class income?
- How were the school experiences of students who met college and career readiness different from those who did not?

What are the root causes behind students' lack of college and career readiness?

- To what extent would the following statement apply to your district?

For many schools, it has been easier to allow students to state an aspirational goal for college and then look the other way, knowing that many students aren't taking the right courses to be prepared. It has also been easier to allow students to make random course choices, rather than ensuring that they are enrolled in a focused, rigorous series of career and academic courses connected to postsecondary studies and good jobs. P. 143.



Why is it important that school, teacher and counselor leaders engaged each student and their families in finding a path forward leading to middle-class earning opportunities? Chapter 9, Pages 160-172

Because students with a goal and plan are more motivated to:

- **Take higher-level courses and make better grades**
- **Attend school regularly and graduate**
- **Have better social skills, study skills and fewer behavior problems**

Why engage all parents/guardians?

- **75% of all parents say schools should prepare students academically for both college and employment.**
- **Half of parents with incomes less than \$50,000 want their students prepared for postsecondary studies, and 90% want their children to know about careers.**

Why Is It Important to Adopt a Growth Mindset and Getting Students to Meet High Expectations?

- **Higher-level knowledge and skills are needed to achieve middle-class income.**
- **At least 95% of students should graduate high school college ready, career ready or both.**
- **The current approach of sorting students into different levels of classes is failing to prepare many students to meet the rising workplace requirements for a good job.**

TOMORROW'S HIGH SCHOOLS: Creating Pathways to Prepare Students for College and Careers

- For information about the book and using it for a study book contact the author Gene Bottoms at 404-202-5143; email:gbottoms25@gmail.com
- SAVE 50%: the book normally sells for \$34.95. Anyone who wishes to purchase 15 or more copies can get an author's discount of 50% plus shipping fees by having order placed by the author.
- You can order directly from ASCD website at the link below:
- *Tomorrow's High Schools: Creating Student Pathways for Both College and Career* (ascd.org)