



## Indicator Explanation



DOMAIN	EFFECTIVE PRACTICE	INDICATOR
Instruction	Remove barriers and provide opportunities	3C.2 The school (HS) provides all students with opportunities to enroll in and master rigorous coursework for college and career readiness.

**Explanation:** The evidence review suggests that the rigor and quality of the high school classes have a definite impact on student access to and future success in college. A high school curricula that increases college prepared- ness includes dual credit, advanced placement, and international baccalaureate offerings. In addition, these classes must be equitably assessable to all students and taught by highly qualified teachers properly trained in the content and strategies necessary to teach these offerings. It is imperative that the entire school staff espouse a culture of achievement and implement the academic supports needed for students to succeed.

**Questions:** What process will the school use to determine and offer dual credit, advanced placement and international baccalaureate classes? How will the school ensure equitable access for all students to these classes? How will the LEA support teachers to equip them with the skill sets necessary to teach a college ready curriculum? How will the school promote an achievement oriented culture? How will the school support students who are challenged by the rigors of college level work? What considerations has the school given to partnering with local higher education institutions to generate additional entry points for high school students to college level classes?

In the current educational landscape, college and career readiness and academic rigor are common discussion topics for policymakers. However, there is a documented desire for these things among educators and students as well. Burris et al. (2008) discuss a seminal 2005 study that found that over three-quarters of the 1,500 public high school students studied felt that they were not prepared for college and they were not challenged in their high school coursework. These students also felt that if their schools had provided them with higher expectations and opportunities for more demanding work, that they would have delivered. The implication of this study is that many students are being grossly underestimated and underprepared for life beyond high school.

At the same time, the expectations of college admissions offices are steadily increasing. Because of their prevalence and popularity, Advanced Placement (AP) courses and others like them have become a proxy or signal for ability and achievement, whether accurate or not Kyburg et al., 2007; Klopfenstein & Thomas, 2009). Klopfenstein and Thomas (2009) write that as of 2006, over 90 percent of higher education institutions surveyed took students' participation in advanced coursework like AP into account when making an admissions decision. High school grade point average, often affected by the weights given to honors or AP courses, is the top point of consideration for admissions officers. If these types of courses are not available to students, or if they are not properly supported to succeed in them, they are at an inherent disadvantage in college admissions.



Adelman (2006) writes that student completion of their high school college-preparatory requirements is “the culmination of opportunity, advisement, choice, effort, and commitment” (p. 9). There are three key aspects of the work of adequately preparing all students for college and careers. First, there must be high expectations from school staff for all students to achieve. Second, all students must have opportunities available to them to pursue higher-level courses and coursework. Lastly, appropriate supports must be in place for all students so that they can succeed in higher-level work, despite their skill or motivation levels. Without all three in place, schools are at risk of not meeting their students’ needs, and worse, creating disadvantages for their students in their future pursuits.

#### *High Expectations for All Students to Succeed*

In order to be equity-minded and provide college preparation to all students, there are necessary changes in “beliefs, curriculum, pedagogy, and school culture” (Burriss, et al., 2008, p. 600). Schneider (2006) discusses this culture shift that must occur in schools that aim to provide a college preparatory experience for their students. Messaging and opportunities around the norms and values of the school must be available to all students; similarly, all staff must internalize these norms and values and work to help each student prepare for and go to college. Schneider also mentions that these expectations and messages must be shared with parents as well, so that all stakeholders are working towards the same ends.

Schneider (2006) highlights three key messages that need to be shared with students in order for them to understand what a college preparatory curriculum demands. First, students must be advised to take the right courses to prepare them. Students must also need to attend school regularly and do well in class, even if that means asking for help. Lastly, students must learn to manage their time between out of school commitments, homework, and other activities, as those who learn this early on tend to be most successful. Similarly, students must understand that the courses they take, their performance within them, and their skills and abilities as demonstrated by the tests they take comprise what Adelman (2006) calls “Academic Resources,” a composite measure that is highly predictive of later academic performance (p. 5).

#### *Opportunities for Rigorous Coursework Available to All Students*

Tierney et al. (2009) state that students should be able to enroll in college coursework right from high school without the need for remediation. Burriss, et al. (2008) discuss how acceleration is a more effective approach for moving students forward than remedial work. However, creating these opportunities for a more universally rigorous curriculum within a school can be difficult and costly. Often, teachers must undergo training and radically shift the content and methods of their instruction. A few options have become especially popular, as they are widely used and pre-designed. The most prevalent options for college-level coursework are Advanced Placement and International Baccalaureate programs.

Advanced Placement (AP) is a program of individual college-level courses that culminate in an exam that can, depending on a student’s score and postsecondary institution, substitute for college credits. International Baccalaureate (IB) provides a holistic experience of academic rigor and personal growth to juniors and seniors (Kyburg et al., 2007; Mayer, 2008). IB programs in schools must be certified by the international board and lead to a special diploma for enrolled students. They also require significant training for teachers (Burriss et al., 2008). While AP schools can choose which AP courses they will offer, the IB program is a complete package, offering integrated courses in six subject areas and additional core activity areas (Mayer, 2008).

Dual-enrollment is another option for schools to increase the amount and quality of rigorous instructional opportunities for students. As opposed to college-level courses like AP or IB, dual enrollment allows students to take actual college courses, through a local postsecondary institution. Students can therefore automatically receive college credits through the partner school. These courses are either offered at a local college or taught on the high school campus by a trained member of the staff (Hughes, 2010).

While all three of these programs were initially used as a source of enrichment for high-performing or gifted students, they are now increasingly being used for the larger student population as a better way to challenge, motivate, and prepare students for postsecondary pursuits. As schools are able to determine the entrance criteria for these types of programs, they



can restrict or expand the access they grant to their students. The expectation does not need to be that all students earn college credits or the IB diploma, but simply that they have the exposure to this type of work and the supports needed for them to do well (Mayer, 2008). Consequently, schools not only need to offer rigorous opportunities for their students, but they also need to advise students to take advantage of them (Tierney et al., 2009).

#### *Adequate Supports to Help Students Succeed in a Rigorous Environment*

If a school's goal is to increase access to the highest-level coursework to disadvantaged or lower-performing students, then structures must be in place to support them throughout the experience. Tierney et al. (2009) write about the importance of using performance data to track student progress throughout these upper-level courses and to determine the appropriate supports for struggling students. Mayer (2008) and Tierney et al., (2009) list a number of options implemented by schools with open-access programs, including advising and counseling, peer and adult tutoring, pre-IB programs that introduce underclassmen to the types of work they will experience in the IB program, and built-in activities for a supportive peer network. Many of these schools take advantage of out of school time (OST) to help students succeed in more difficult coursework, whether it is in the form of after-school tutoring or Saturday academies.

When providing these supports to students, it is critical that they still maintain their own voice and ability to choose their path, while still being treated as the young adults that they are (Adelman, 2006; Kyburg et al., 2007). Ultimately, students determine their own paths, but with equitable and rigorous messaging, opportunities, and supports, their likelihood of success is much greater.

#### References

- Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college*. U.S. Department of Education, Office of Vocational and Adult Education. <http://files.eric.ed.gov.proxy.library.vanderbilt.edu/fulltext/ED490195.pdf>
- Adelman, C. (1999). *Answers in the toolbox. Academic intensity, attendance patterns, and bachelor's degree attainment*. U.S. Department of Education.
- Bailey, T., Hughes, K., & Karp, M. (2002). *What role can dual enrollment programs play in easing the transition between high school and postsecondary education?* Community College Research Center and Institute on Education and the Economy at Teachers College, Columbia University. <http://files.eric.ed.gov.proxy.library.vanderbilt.edu/fulltext/ED465090.pdf>
- Burris, C. C., Wiley, E. W., Welner, K. G. & Murphy, J. (2008, March). Accountability, rigor, and detracking: Achievement effects of embracing a challenging curriculum as a universal good for all students. *Teachers College Record*, 110(3), 571–608. [http://nepc.colorado.edu.proxy.library.vanderbilt.edu/files/burriswileywelner\\_accountability\\_rigor\\_and\\_de-tracking.pdf](http://nepc.colorado.edu.proxy.library.vanderbilt.edu/files/burriswileywelner_accountability_rigor_and_de-tracking.pdf)
- Conley, D. (2007, March). *Redefining college readiness*. Educational Policy Improvement Center. <http://files.eric.ed.gov.proxy.library.vanderbilt.edu/fulltext/ED539251.pdf>
- Hughes, K. (2010). Dual Enrollment: Postsecondary/Secondary Partnerships to Prepare Students. *Journal of College Science Teaching*, 39(6), 12-13. [http://inpathways.net/postsecondary\\_secondary\\_dual.pdf](http://inpathways.net/postsecondary_secondary_dual.pdf)
- Dougherty, C., Mellor, L., & Jian, S. (2006). *The relationship between advanced placement and college graduation*. National Center for Educational Accountability.
- Hargrove, L., Godin, D., & Dodd, B. (2008). *College outcomes comparisons by AP and non-AP high school experiences* (Research Rep. N. 2008-3). College Board. <http://research.collegeboard.org/sites/default/files/publications/2012/7/researchreport-2008-3-college-outcomes-ap-non-ap-high-school-experiences.pdf>
- Jackson, C. K. (2009). *A little now for a lot later: A look at a Texas Advanced Placement incentive program*. Cornell University, School of Industrial and Labor Relations. <http://jhr.uwpress.org.proxy.library.vanderbilt.edu/content/45/3/591.full.pdf>
- Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. R. (2007). *The postsecondary achievement of participants in dual enrollment: An analysis of student outcomes in two states*. University of Minnesota, National Center for Career and Technical Education.
- Klopfenstein, K., & Thomas, M. K. (2009). The link between Advanced Placement experience and early college success. *Southern Economic Journal*, 75(3), 873-891. <http://www.jstor.org.proxy.library.vanderbilt.edu/stable/27751419>



- Keng, L., & Dodd, B. G. (2008). *A comparison of college performances of AP and non-AP student groups in 10 subject areas* (Research Rep. No. 2008-7). College Board.
- Kyburg, R., Hertberg-Davis, H., & Callahan, C. (2007, Winter). Advanced placement and international baccalaureate programs: Optimal learning environments for talented minorities? *Journal of Advanced Academics*, 18(2), 172–215. <http://files.eric.ed.gov.proxy.library.vanderbilt.edu/fulltext/EJ767449.pdf>
- Martinez, M., & Klopott, S. (2003). *Improving college access for minority, low-income, and first generation students*. Pathways to College Network Clearinghouse.
- Mayer, A. (Winter 2008). Expanding opportunities for high academic achievement: An international baccalaureate diploma program in an urban high school. *Journal of Advanced Academics*, 19(2), 202–235. <http://files.eric.ed.gov.proxy.library.vanderbilt.edu/fulltext/EJ794091.pdf>
- McCauley, D. (2007). *The impact of Advanced Placement and dual enrollment programs on college graduation*. Texas State University.
- Oakes, J., & Saunders, M. (2007). *Multiple pathways: High school reform that promises to prepare all students for college, career, and civic responsibility*. University of California—Los Angeles.
- Quint, J., Thompson, S.L., & Bald, M. (2008). *Relationships, rigor, and readiness: Strategies for improving high schools*. Manpower Demonstration Research Corporation.
- Roderick, M., Nagaoka, J., & Coca, V. (Spring 2009). College readiness for all: The challenge for urban high schools. *The Future of Children*, 19(1), 185–210. <http://ccsrdev.uchicago.edu.proxy.library.vanderbilt.edu/sites/default/files/publications/Future%20of%20Children.pdf>
- Schneider, B. (2006). *Forming a college-going community in U.S. public high schools*. Michigan State University. <https://docs.gatesfoundation.org/documents/collegegoing.pdf>
- Siskin, L. S., & Weinstein, M. (2008). *Supplemental survey to “Creating support structures and services for Title I high schools implementing the International Baccalaureate programs.”* Institute for Education and Social Policy.
- Taylor, M.L., & Porath, M. (2006, Spring). Reflections on the International Baccalaureate Program: Graduates’ perspectives. *The Journal of Secondary Gifted Education*, XVII(3), 21–30. <http://files.eric.ed.gov.proxy.library.vanderbilt.edu/fulltext/EJ746052.pdf>
- Tierney, W. G., Bailey, T., Constantine, J., Finkelstein, N., & Hurd, N. F. (2009). *Helping students navigate the path to college: What high schools can do: A practice guide* (Publication No. NCEE 2009-4066). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. <http://files.eric.ed.gov.proxy.library.vanderbilt.edu/fulltext/ED506465.pdf>
- Wagner, T. (2006). Rigor on trial. *Education Week*. [http://www.studentachievement.org/wp-content/uploads/Rigor-on-Trial\\_EdWeek.pdf](http://www.studentachievement.org/wp-content/uploads/Rigor-on-Trial_EdWeek.pdf)
- Wimberly, G. L., & Noeth, R. J. (2005). *College readiness begins in middle school: ACT policy report*. ACT, Inc. [schoolalliance.org/documents/issue\\_briefs/issue\\_preventing\\_dropouts\\_60.pdf](http://schoolalliance.org/documents/issue_briefs/issue_preventing_dropouts_60.pdf)
- Reducing dropout rates through extended learning opportunities. (2009, October). National Governor’s Association Center for Best Practices. <http://files.eric.ed.gov.proxy.library.vanderbilt.edu/fulltext/ED507637.pdf>