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PBIS HIGH SCHOOL IMPLEMENTATION:

Leveraging Features of the PBIS
Framework to Support College and
Career Readiness

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Introduction

High Schools across the U.S. have recognized the importance of college and career readiness (CCR) for all students, including students with disabilities. However, many schools struggle with developing an efficient system to effectively deliver CCR instruction and experiences to all students. The implementation of PBIS in high schools offers an opportunity to consider how the PBIS framework can support CCR for all students. The purpose of this brief is to provide guidance and concrete examples to school personnel of how schools can leverage an existing PBIS framework to support CCR efficiently and effectively.



The PBIS framework provides a foundation for supporting the delivery of CCR. PBIS outcomes are closely aligned with documented risk factors for drop-out (Freeman et al., 2015). In other words, the risks for drop-out may be countered by positive PBIS outcomes. For example, students are more likely to drop out of school if they experience frequent discipline referrals, suspensions, and expulsions, and behavior challenges in schools and communities. PBIS outcomes include reductions in behavior incidents, bullying behavior, suspensions, and expulsions. Truancy, frequent tardiness, and high student mobility are additional risk factors for dropout that may be reduced through PBIS implementation. Finally, PBIS implementation supports improved academic performance, less off-task behavior, and increased time for instruction decreasing the risk of disengagement. Overall, implementing PBIS supports the development of protective factors with the goal of keeping students in school. Ensuring students stay in school sets the stage for further development of CCR.

High schools that adapt PBIS should take into account the key contextual differences of high schools. This includes school size, organizational structures, and developmental learning of students. (Flannery, Frank, Kato, Doren, & Fenning, 2013; Swain-Bradway, Pinkney, & Flannery, 2015). Integrating CCR within the PBIS framework may facilitate adaptations to PBIS in high school by directly linking non-academic skills such as social/emotional/behavioral learning, with academic achievement, and post-school outcomes. CCR can bring essential high school PBIS elements together by focusing on skills that secondary students need in their future.



In summary, the core features of the PBIS framework can be leveraged to support the delivery of CCR for all students, and the delivery of CCR through the PBIS framework can support adaptation of PBIS to the high school context. This brief is intended to provide school and district leadership teams with information about CCR, including concrete examples of how CCR can be integrated with PBIS.

College and Career Readiness

CCR has been defined in several ways including within the plans required of states within the Every Student Success Act (ESSA, 2015). For the most part, CCR is noted to include both academic and nonacademic topics (English, Rasmussen, Cushing & Therriault, 2016). Similarly, Morningstar et al.. (2017) suggested that CCR incorporate academic and non-academic skills necessary for students with disabilities to be successful. Their framework was developed from a synthesis of several research-based multidimensional



theoretical and research-supported models of CCR (Bradshaw et al., 2014; Conley, 2010; Dymnicki et al., 2013; Farrington et al., 2012). More recently, their CCR model has been empirically tested, showing two measurable factors: General CCR and Transition Knowledge (Lombardi et al., 2018).

CCR Domains

In light of these initial findings, the most recent iteration of the CCR organizing framework includes five domains: (a) academic engagement, (b) ownership of learning, (c) process-oriented skills, (d) interpersonal engagement, and (e) transition competencies (Lombardi et al., 2020). The following section describes the areas of focus and examples which expand the domains.

For more information on the specific categories or domains of CCR, please view the video [*How do you know Students are College and Career Ready?*](#)¹

Academic Engagement (AE)

Academic Engagement is the acquisition of academic content through interacting and engaging with the material, including cognitive and behavioral skills that students need to successfully engage with academics. These skills may include attendance, homework completion, active in-class participation and less observable skills such as making connections between content in different courses. Examples include:

- Content area knowledge (i.e., core academics, career and technical content, electives)
- Knowledge structures (i.e., factual and conceptual knowledge; Blooms taxonomy)
- Organizing concepts (i.e., linking ideas and

concepts across and within core and elective content to make knowledge relevant and meaningful to youth)

- Challenge levels (i.e., depth of knowledge)
- CTE course enrollment (i.e., Agriculture, Science, & Technology; Business and Marketing Technology; Career Readiness/Work-based Learning; Family and Consumer Sciences; Science, Technology, Engineering, Mathematics; Trade and Industry)
- Classroom behaviors (e.g., student behavior towards class work; on-task, active engagement, passive engagement)
- Work habits (e.g., completing homework, in-class activities, productivity)
- Attendance (regular attendance)
- Course completion

Process-oriented Skills (PS)

Process-oriented skills are the skills needed to access and engage in academics may include organizational strategies, test taking, studying, and time management, as well as critical thinking skills such as formulating problems, hypothesize solutions, collect evidence, analyze the evidence, and communicate findings. These skills span across content areas. Examples include:

- Learning strategies (e.g., organization, note taking, studying, time management)
- Critical thinking skills (e.g., formulating problems, hypothesize solutions, collect evidence, analyze the evidence, communicate findings & present knowledge).
- Creativity (e.g., brainstorming, developing new ideas, creating new knowledge)



- Accessing content (note taking, organizational strategies, accommodations)
- Technology (e.g., IT literacy, educational technology, consumer technology tools, assistive technology)
- Group communication, listening, & communication skills (e.g., in-class whole and small group work)

Interpersonal Engagement (IE)

Interpersonal Engagement includes skills related to interactions with others in schools as well as self-understanding of social emotional learning. Students show responsibility and adaptability across educational and non-educational settings, collaborate with peers, have an awareness in how others may be feeling or perceiving situations, and possess a sense of belonging with the school. Examples include:

- Responsibility of self (e.g., internal locus of control, self-awareness of learning and engagement with others)
- Adaptability/flexibility with others
- Leadership, assertion skills
- Collaboration with others
- Social awareness, empathy toward others
- Respect of diversity

Ownership of Learning (OL)

Ownership of Learning includes skills related to a growth mindset, self-determination, and perseverance. Specifically, that all students have the ability to take academic risks and understand the importance of the growth that comes from making mistakes. Examples include:

- Sense of belonging
- Growth mindset (e.g., learning from mistakes, academic risk-taking)
- Help seeking
- Self-determination and self-advocacy
- Perseverance, grit
- Motivation, interest in learning
- Goal-setting skills

Transition Competencies (TC)

Transition competencies are the skills and activities that facilitate competency in employment, postsecondary education, and independent living, with a focus on understanding shifting cultures and responsibilities within each unique setting. Students must be able to understand and act on underlying processes leading to college and career outcomes. Examples include:

- Understanding differences between high school and college environments (living, academic expectations, etc.)
- College culture (e.g., campus resources, program of study, faculty expectations, campus living)
- Career culture (professionalism, supervisor and co-worker relations, workplace fit, employer expectations)
- Early planning (goals tied to interests, applications, interviews, financial planning, individual and environment fit)
- Adult roles and responsibilities (financial literacy, health wellness, accessing community)



Integrating CCR into PBIS

The PBIS framework is organized around four critical features: outcomes, data, practices, and systems. This section describes how each of these features can be leveraged to support the delivery of CCR.

Outcomes

Schools begin PBIS implementation by identifying locally important outcomes or goals. Typical examples might be reductions in office discipline referrals or improving attendance or academic engagement. Identifying CCR for all students as a key outcome provides an important context for the relevance of some of the typical short-term outcomes related to PBIS implementation. When explicit connections between behavior, attendance, and academic engagement are made to adolescents by tying these outcomes to broader long-term CCR outcomes, such as college enrollment and future careers, staff and students better understand essential connections. When integrating CCR into PBIS, high schools should develop a long-term outcome statement and directly link shorter term outcomes to those long-term goals.

For example, a high school might identify a key long-term outcome of ensuring that their students are CCR as measured by student and staff perceptions. Then a school may identify specific improvements in attendance, interpersonal skills, or process-oriented skills that directly support student long-term goals associated with transition from high school to college and career outcomes.

In summary, making explicit connections between short and long-term outcomes helps students and



staff understand how short-term goals (e.g., improving interpersonal skills, increased attendance) are related to each other and the larger goal of preparing for college and careers.

Data

Experts recommend high schools consider four main sources of data to guide their PBIS implementation: attendance, behavior, academics, and climate. See [Using Outcome Data to Implement Multi-tiered Behavior Support \(PBIS\) in High Schools²](#) for more information and guidance about using these data sources to improve implementation outcomes. Moreover, using a combination of academic and behavioral variables along with perception data



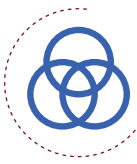
(e.g., school climate), will allow for a more robust examination of multi-faceted constructs that comprise the CCR domains. Proponents have described the importance of utilizing data-based decision making when merging CCR within multi-tiered systems, such as PBIS in high schools (Morningstar, Lombardi & Test, 2018), particularly by including CCR data in existing student-level data systems. An example of this approach is the construct Sense of Belonging, a part of the Interpersonal Engagement and Ownership of Learning domains. Sense of Belonging is generally thought of as students' connection with school, specifically their feelings about adults and peers. Sense of Belonging is relevant to CCR because it may be a precursor to students' willingness to take risks, learn, and grow in academic and social ways (Farrington et al., 2012).

High schools supporting CCR delivery with their PBIS framework may consider expanding data use to include student and staff perceptions as measures of specific CCR constructs. Data sources should be reliable, valid, and aligned to a school's specific outcome goals. CCR data collection should be considered a Tier I priority. An example of a school-wide CCR measure is the College and Career Readiness for Transition (CCR4T), a newly developed measure of student perceptions of CCR in academic and non-academic areas that map onto the five domains. More [information about the development of CCR4T and opportunities to partner in research efforts](#)³ is available online

Practices

PBIS practices are generally considered to be activities directly experienced by students. Two key practices

within PBIS are teaching and reinforcing expectations. These practices can be leveraged to support the development of CCR for all students. PBIS high schools generally define 3-5 behavioral expectations across specific routines or settings within the school. Many CCR skills can be easily embedded into this matrix and the school-wide lessons that are developed from it. For example, incorporating career planning processes across multiple tiers of instruction may be beneficial (e.g., individual learning plans at Tier 1, work-based learning experiences at Tier 2, customized employment practices at Tier 3, ensures student engagement and motivation in high school settings; Morningstar, et al., 2018). This approach ensures all students are provided with direct instruction and supports across key CCR skills. Additionally, PBIS schools typically use a school-wide reinforcement system to acknowledge when students meet expectations. See [High School Acknowledgment Systems Practice Brief](#)⁴ for more information. This reinforcement system can also be used to acknowledge target CCR skills. Chapter 5 in [Lessons learned on Implementation of PBIS in High School: Current Trends and Future Directions](#)⁵ provides additional detail and examples of integrating CCR skills within the behavior matrix, lesson plans, and acknowledgment systems based on the initial 6-domain framework (Morningstar et al., 2017) and easily transferable to the 5 domains. This also includes a self-assessment for school teams to use to assess the extent to which their behavior matrix covers all CCR construct areas.



Systems

Within PBIS, systems are the supports provided to educators to ensure they have the knowledge and support needed to successfully implement each practice. Providing high quality professional development and coaching support (see [Training and Professional Development Blueprint for PBIS](#))⁶ to teachers will ensure school staff are able to fully integrate CCR practices into academic and behavioral instruction. Additionally, the strategic integration and alignment of PBIS and CCR initiatives allows schools to deliver both supports more efficiently and effectively. See the [Technical Guide for Alignment of Initiatives, Programs, and Practices in School Districts](#)⁷ for more detail about alignment.

Intensifying CCR Support for Students

Who Need More

Ensuring all students are included in robust Tier 1 support for CCR is a critical foundation that sets students up for success and frees up resources to support those that who may need additional supports. School teams should review data to identify students in need of additional support in key CCR areas. School teams should also determine innovative and efficient methods of using data to guide the selection and implementation of Tier 2 and 3 supports. Table 1 provides examples of evidence-based curricula that may support each domain of CCR. School teams should consider using these as Tier 2 or 3 CCR intervention supports. Just as with behavioral and

Table 1: Examples of Evidence-based Curricula that Support CCR

Domain	Evidence-based Practices	Systems-level Supports
Academic Engagement (AE)	<ul style="list-style-type: none">• Check in/Check out• Check and Connect	<ul style="list-style-type: none">• Co-teaching• Inclusive instruction (Universal Design)• Attendance initiatives
Process-oriented skills (PS)	<ul style="list-style-type: none">• Digital and blended learning• Self-regulated strategy development (SRSD)• Peer supports	<ul style="list-style-type: none">• Information Technology Literacy• Credit recovery• Online learning• After school tutoring
Interpersonal Engagement (IE)	<ul style="list-style-type: none">• Social and emotional learning• Mental Health/Wraparound services• Social skills/communication• Peer mentoring	<ul style="list-style-type: none">• Positive Behavioral Interventions and Supports (PBIS)• School Climate Surveys
Ownership of Learning (OL)	<ul style="list-style-type: none">• Self-Determined Learning Model of Instruction• Self-directed IEP	<ul style="list-style-type: none">• Dropout Prevention• Individual Learning Plans, including SOP• Promoting growth mindsets (Brainology)
Transition Competencies (TC)	<ul style="list-style-type: none">• Work-based learning (paid and unpaid)• Self-advocacy skills	<ul style="list-style-type: none">• Financial literacy• Transportation• Health and wellness, including sexuality



academic advanced Tier supports, it is essential that teams ensure advanced Tier support is aligned with Tier 1 and is delivered as an “extra dose” of support rather than replacing Tier 1 supports.

Conclusion

By leveraging the PBIS framework to support CCR, educators have the ability to help ensure all students leave high school prepared for future success in both employment and/or postsecondary education. Integrating the key areas of CCR within outcomes, data, practices, and the systems features of PBIS can help ensure all students have access to effective and efficient supports to better prepare for the future.

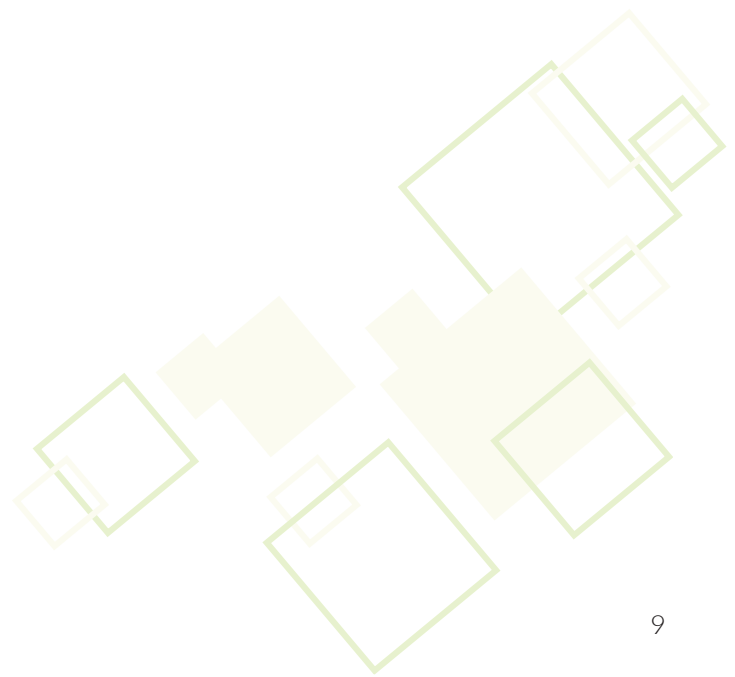
Additional Resources

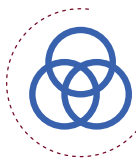
[Lessons learned on Implementation of PBIS in High School: Current Trends and Future Directions](#)⁸ (Chapter 5 provides more detail on integrating CCR and PBIS)

[Monograph on SWPBIS Implementation in High Schools: Current Practice and Future Directions](#)⁹

[NTACT Ask the Experts video](#)¹⁰

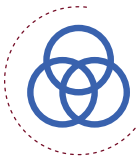
[Sense of Belonging video](#)¹¹





References

- Bradshaw, C. P., Waasdorp, T. E., Debnam, K. J., & Johnson, S. L. (2014). Measuring school climate in high schools: A focus on safety, engagement, and the environment. *Journal of School Health, 84*, 593-604.
- Every Student Succeeds Act (2015). Pub. L. No. 114-95 § 114 Stat. 1177 (2015-2016)
- Freeman, J., Simonsen, B., McCoach, D.B., Sugai, G., Lombardi, A. R., & Horner, R. (2015). An analysis of the relationship between implementation of school-wide positive behavior interventions and supports and high school dropout rates. *The High School Journal, 98*, 290–315. doi: 10.1353/hsj.2015.0009
- Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2012). *Teaching Adolescents to Become Learners: The Role of Noncognitive Factors in Shaping School Performance--A Critical Literature Review*. Chicago, IL: Consortium on Chicago School Research.
- Lombardi, A. R., Freeman, J., & Rifenbark, G. G. (2018). Modeling college and career readiness for adolescents with and without disabilities: A bifactor approach. *Exceptional Children, 84*(2), 159-176. doi: 10.1177/0014402917731557
- Lombardi, A., Monahan, J., & Morningstar, M. (2020). Integrating college and career readiness into transition education. In K. Shogren & M. Wehmeyer (Eds.). *Handbook of Adolescent Transition Education for Youth with Disabilities* (2nd Edition). New York, NY: Routledge.
- Morningstar, M.E., Lombardi, A., Fowler, C., & Test, D. (2017). A college and career readiness framework for secondary students with disabilities. *Career Development and Transition for Exceptional Individuals, 40*(2), 79-91. doi: 10.1177/2165143415589926
- Morningstar, M. E., Lombardi, A., & Test, D. (2018). Including college and career readiness within a multitiered systems of support framework. *AERA Open, 4*(1), 2332858418761880.
- Rifenbark, G., Lombardi, A., Freeman, J., & Morningstar, M. (under review). The sense of belonging index: A Multiple-Indicator Multiple Causes model of adolescent perceptions and school data. *Manuscript submitted for publication*.



Embedded Hyperlinks

1. <https://transitioncoalition.org/blog/webinar/how-do-you-know-students-are-college-and-career-ready/>
2. <https://www.pbis.org/resource/using-outcome-data-in-high-schools>
3. <https://ccr4t.education.uconn.edu>
4. <https://www.pbis.org/resource/high-school-acknowledgement-systems>
5. <https://www.pbis.org/resource/lessons-learned-on-implementation-of-pbis-in-high-schools-current-trends-and-future-directions>
6. <https://www.pbis.org/resource/training-and-professional-development-blueprint-for-pbis>
7. <https://www.pbis.org/resource/technical-guide-for-alignment-of-initiatives-programs-and-practices-in-school-districts>
8. <https://www.pbis.org/resource/lessons-learned-on-implementation-of-pbis-in-high-schools-current-trends-and-future-directions>
9. <https://www.pbis.org/resource/monograph-on-swpbs-implementation-in-high-schools-current-practice-and-future-directions>
10. <https://transitioncoalition.org/blog/webinar/how-do-you-know-students-are-college-and-career-ready/>
11. <https://youtu.be/iUHazZqC4nU>

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