



Engaging High School Students in Learning

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Abstract

Although increasing student engagement may seem to be a daunting task for schools and educators, several strategies have been shown to predict improved engagement and achievement. This chapter provides an overview of strategies that have been studied and supported with research evidence. First, we discuss why it is important for teacher teams to track engagement and implement multi-tiered response systems for students who have disengaged from school. Next, we discuss the importance of increasing students' sense of belonging through building positive adult and peer relationships, implementing nonpunitive behavior systems, connecting with parents and the community, and supporting social-emotional skills. Then, we explore strategies for building student confidence, which should, in turn, lead to increased engagement. Finally,

we overview the ways for school teams to support student agency through supporting autonomy in the classroom and making connections between school and students' future postsecondary success. We argue that schools and students will likely see the most benefits if they implement several of these strategies in tandem.

Engaging High School Students in Learning

A high school diploma should be seen not as the end of schooling, but as a necessary step toward postsecondary education and training. Securing a well-paying job now requires schooling past the twelfth grade, such as an occupational certificate, industry training, or a college degree. Those who graduate from high school with a high level of success are more likely to succeed in college or trade school. According to the US Bureau of Labor Statistics (2009), the difference between the average weekly earnings of high school dropouts (\$595) was somewhat lower than that of high school graduates (\$742) but much lower than that of those with a bachelor's or professional degree (\$1248 and \$1861, respectively). Unemployment among adults with less than a high school degree (5.4%) is also greater than among high school diplomas (3.7%), bachelor's (2.2%), or professional degrees (1.6%).

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In the USA, high school success determines students' trajectories toward decent employment. This success is largely dependent upon their level of motivation and engagement in school. We define motivation as the anticipation of potential enjoyment, challenge, or usefulness that causes people to invest effort in a particular experience. Students can be motivated for many different reasons. Some are just motivated to "get through school" as a step toward a future job; others are motivated by high grades and recognition from teachers and parents, and still, others are motivated by learning new topics and ideas. Motivations for school fall on a continuum of extrinsic motivation, based on the pressure from teachers, peers, and family members, to intrinsic motivation, based on the internal drives to learn and do well. Students can experience motivation from multiple sources at once.

Engagement in school, however, is defined as students' behavioral, cognitive, affective, and social involvement in instructional activities (Lutz et al., 2006) and can be considered a visible manifestation of their motivation (Skinner & Pitzer, 2012). We espouse Fredricks et al.'s (2004) definitions of affective or emotional engagement as a physical display of emotion, behavioral engagement as active participation in academic activities, and cognitive engagement as a mental investment in learning. In addition, however, we include social engagement as a core dimension of the construct. As Guthrie and Wigfield (2000) have noted, the exchange of ideas about academic subject matters with peers in "communities of literacy" is an important aspect of school and learning.

Research indicates that both motivation and engagement decline in middle school and continue to decline throughout high school (Gnamb & Hanfstingl, 2016; Guthrie & Davis, 2003; Skinner et al., 2008; Wang & Eccles, 2012; Wigfield, 1994). For example, in an examination of data from 23 Maryland public middle schools over three data collection waves at seventh, ninth, and eleventh grade, Wang and Eccles (2012) found that average growth trajectories of engagement, measured by school participation, percep-

tion of school belonging, and self-regulated learning, decreased.

Since motivation and engagement are inextricably linked, strategies to increase motivation should also improve engagement. According to the basic needs theory, which is a micro theory within the larger self-determination theory, students are motivated by activities that support relationships, competence, and autonomy (Deci & Ryan, 2000). We argue that interventions to increase student motivation, and thus engagement, should address one or more of these basic needs. First, schools need to increase students' sense of belonging in their school environments by increasing the relationships between adults and students, students and their peers, school staff and parents, and by reducing harsh and punitive punishments while increasing the use of positive behavior systems. Second, educators need to work together to increase students' feelings of competence in their schoolwork by matching instruction to students' level, providing helpful feedback, and recognizing the progress made. Finally, interventions should focus on supporting students' autonomy by giving them a sense of control in their school and classroom and helping them feel in control of their futures through career exploration. According to self-determination theory, humans need to feel related to others, competent, and autonomous to be fulfilled in their natural psychological needs and flourish. By helping students become more engaged and motivated in school, schools can not only help students become better students and future employees, but also support their development as human beings.

Supporting student engagement at school and with learning is a complicated process, but there are strategies that have been shown, individually, to correlate with improved engagement and achievement. Such strategies may be even more effective when implemented together. In this chapter, we cover the strategies listed in Table 1. First, we discuss why it is important for teacher teams to track engagement and implement multi-tiered response systems for students who have disengaged from school. Next, we discuss the importance of increasing students' sense of

Table 1 Interventions to Increase Engagement of High School Students

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|---|--|
| 1. Tracking engagement | Using predictive indicators of engagement |
| | Teacher teams focused on improving engagement |
| | Using multi-tiered response systems |
| 2. Building a sense of belonging | Building positive relationships with adults |
| | Building connection with peers |
| | Building communication with parents |
| 3. Building student confidence | Matching the level of instruction to the student |
| | Checks for understanding and helpful feedback |
| 4. Giving students agency over learning | Student choice |
| | Building connections to careers |

belonging through building positive adult and peer relationships, implementing nonpunitive behavior systems, connecting with parents and the community, and supporting social–emotional skills. Then, we explore strategies for building student confidence, which should, in turn, lead to increased engagement. Finally, we overview ways for school teams to support student agency through supporting autonomy in the classroom and making connections between school and students’ future postsecondary success.

Tracking Engagement

A student’s decision to drop out is not often based on an unanticipated life event or a disinterest in graduation but on a gradual process of disengagement that occurs over years prior to and during high school (Anderson et al., 2004; Fine, 1991; Orfield, 2004). Yet the many factors that enter into this decision, such as mobility, safety, peer influence, and family history, could make dropout prevention seem to be an impossible challenge. However, work in Chicago and Philadelphia has shown not only that this supposedly “intractable” problem of high school disengagement and drop-

out is something that can be tracked, but that interventions can be put in place to remove the barriers that deter students from graduation and postsecondary success (Allensworth, 2013; Allensworth & Easton, 2005; Davis et al., 2018). The following section summarizes the research on indicators used to track disengagement from school, schools’ use of teacher teams to track these indicators and develop student-level interventions, and multi-tiered response systems that provide the magnitude of response necessary for individual students.

Using Predictive Indicators of Engagement

The identification of early warning indicators to predict graduation started with work by Allensworth and Easton (2005). They found that one indicator, sufficient credits to be promoted to 10th grade, predicts high school graduation with 80% accuracy and is thus more predictive than student test scores or background characteristics (Allensworth, 2012; Allensworth & Easton, 2005). However, knowing whether students earned enough credits by the end of ninth grade does not help school staff intervene mid-year. Yet schools already track behavioral manifestations of disengagement, such as absenteeism, lack of attention and assignment completion, and misbehavior. Research on data from Chicago and Philadelphia schools shows that these disengagement indicators (poor attendance, behavior, and course performance) not only predict failure to graduate (Allensworth & Easton, 2005, 2007; Balfanz & Herzog, 2005; Balfanz et al., 2007; Neild & Balfanz, 2006) but can be used to intervene mid-year (Mac Iver et al., 2019). These indicators have been found to be predictive of non-graduation in other districts as well (Balfanz & Boccanfuso, 2007; Balfanz & Byrnes, 2010; Baltimore Education Research Consortium, 2011; Mac Iver et al., 2009; Meyer et al., 2010; Silver et al., 2008).

Recent research has shown that high school graduation predictors, including attendance, behavior, and course performance, are also

predictive of college enrollment and persistence when different thresholds are used (Balfanz & Byrnes, 2019). In particular, findings from a study of Boston high school students show that good attendance (94% or above) and a strong GPA (2.7 or above) are very predictive of earning a 4-year college degree (Balfanz & Byrnes, 2019). These findings also suggest that taking challenging courses, such as the sequence of qualifying courses for admission to the state university system or college-level courses offered in high school (e.g., AP, dual enrollment), is also a key metric for being on track to postsecondary success.

In response to the predictive nature of early warning indicators, nationwide attention has focused on developing early warning systems (e.g., Dynarski et al., 2008; Pinkus, 2008; Therriault et al., 2013). A U.S. Department of Education survey indicated that at least half of American high schools use a system that monitors and flags students with early warning indicators (2016). However, there is only minimal evidence that examining alone will have an effect on student outcomes. Of six studies reviewed by Rumberger et al. (Rumberger et al., 2017), only two found that examining data reduced student dropout rates.

Teacher Teams Focused on Improving Engagement

Just tracking students' engagement in school is not enough. Teachers and school staff must reach out to struggling students to focus on getting them engaged in school and on track to graduation. Interventions in the ninth grade are particularly important since there is a documented drop in engagement and grades over the transition from middle to high school (Benner, 2011; Benner & Graham, 2009; Roderick & Camburn, 1999; Seidman et al., 1996; Simmons & Blyth, 1987). Through interviews with teachers and students, and observation of English and mathematics courses in eighth and ninth grade, Allensworth (2013) reported that the decrease in engagement was not aligned with increased academic rigor; many students reported less academic pressure in

their ninth-grade classes. However, the study noted a decline in adult monitoring and support in ninth grade compared to eighth grade. This suggests that monitoring ninth-grade students' engagement and effort and providing support for those falling behind is important to improve their likelihood of graduation from high school.

Grade-level teacher teams, which have long been a staple of successful middle-grade schools, are increasingly being used in ninth grade, especially in high-needs schools (Krone, 2019). The benefits of using teams have been acknowledged in business (e.g., Guttman, 2008) as well as education (e.g., Clark & Clark, 1994). The term "distributed leadership" is used to describe how successful educational leadership can be exercised through the relationships built among faculty and staff rather than a single individual, such as a principal or headmaster (Scribner et al., 2007). Research indicates that shared decision-making is the *impetus* for school change (Preskill & Torres, 1999).

Using Multi-tiered Response Systems to Increase Engagement

In an early warning response system, timely interventions in response to early warning indicator data are the key to getting students back on track. Early warning teams should provide "intensive, individualized support to students who have fallen off track and face significant challenges to success" (Rumberger et al., 2017, p. 20). Further, an adult advocate should lead the support for each student. We suggest that interventions also be tiered so that teams develop interventions that are school or grade wide (Tier 1), targeted interventions for small groups of students with similar indicators (Tier 2), or intensive individual interventions for focus students (Tier 3). Especially in recent years, such a tiered approach has been well documented and supported by research (Fredricks et al., 2019; Reschly, 2020). Even when targeting particular sub-constructs of engagement, such multi-tiered frameworks may be employed (Cook et al., 2020). Of the eight studies that examined the use

of individualized supports for students who have fallen off the track to graduation and met the What Works Clearinghouse standards “without reservations,” Rumberger et al. (Rumberger et al., 2017) found that four of the studies indicated improvements in either attendance, behavior, or course performance of students. In addition, two of the three of these studies that examined high school graduation found significant improvements in graduation outcomes.

Although many schools have a system of early warning identification (U.S. Department of Education, 2016), many do not have an intervention system in place to help struggling students. A recent randomized control study suggests that data monitoring and team meetings may not be sufficient to effect changes in student outcomes; an organized intervention plan is necessary for an early warning system to be effective (Davis et al., 2018). Implementing and monitoring interventions for struggling students, and using a diversity of interventions, were the factors related to improved outcomes. Recent research using randomized control trials to evaluate two early warning and intervention systems that use teams, the “Early Warning Intervention and Monitoring System” (EWIMS, Faria et al., 2017) and the “Early Warning Intervention (EWI) Team Model” (Mac Iver et al., 2019; Davis et al., 2018), confirm that these systems lead to improvements in student attendance and course performance.

Interventions should re-engage students who have fallen off the path to graduation. However, school teams often reuse the same interventions over and over (e.g., phone calls to parents or individual tracking sheets that students carry to their classes), rather than trying new ideas. Our research shows that teams using a varied approach have better outcomes for attendance and grades than those that used only a few intervention types (Davis et al., 2018). Schools may benefit from taking advantage of the growing literature on effective and promising interventions. For example, the Peer Assisted Learning Strategies (PALS) intervention, designed to enhance academic engagement (Reschly, 2020), could be paired with the Establish-Maintain-Restore approach,

which cultivates affective engagement through teacher–student relationships (Cook et al., 2020).

Increasing Students’ Sense of Belonging

According to the basic needs theory (Deci & Ryan, 2000), which is a part of the larger self-determination theory, students’ motivation will increase if their basic need for relationships is fulfilled. In the field of education, fulfillment of the need for relationships can be measured by students’ sense of connectedness to school. We define school connectedness as believing that one is welcome, wanted, cared about, and needed in school. Research on school belonging shows that students who are connected to their school are less likely to demonstrate negative behaviors such as drug use, violence, absenteeism, and risky activities that could lead to injury, such as drinking and driving (Blum et al., 2002; Resnick et al., 1993); they also have greater school achievement (Booker, 2004; Hughes et al., 2015) than less-connected students. However, a recent national study found that only 39% of high school students reported feeling that they belonged in their school, only 36% reported having supportive relationships with adults in their school, and only 40% reported having supportive relationships with their peers (Margolius et al., 2020). The sense of belonging begins to decrease in middle school (Centre for Education Statistics and Evaluation, 2017).

Building Positive Relationships with Adults

For students to feel that they belong and are welcomed in their school, they need to know that adults in the school not only want them there but also are actively trying to support their success both in school and in life. However, building connections between adults and students takes work. Not only do the adults need to understand the difficulties students face in life and work completion, but they must actively reach out to students

in caring and thoughtful ways and be accepting and aware of students' cultures.

Teacher–Student Relationships The strength of relationships built between students and the adults in their school, especially with their teachers, can influence student engagement (Pianta et al., 2012; see also Hoefkens & Pianta, chapter “Teacher-Student Relationships, Engagement in School, and Student Outcomes”, this volume; Scales et al., chapter “Developmental Relationships and Student Academic Motivation: Current Research and Future Directions”, this volume). For example, Roorda et al. (2011) used a meta-analytic approach to examine correlations between student-teacher relationships and both engagement and achievement. From the 99 studies that matched their criteria, they found correlations between positive teacher–student relationships and both engagement and achievement, as well as negative associations between negative teacher–student relationships and engagement and achievement. The associations for negative associations were stronger than those for the positive associations, showing that it is even more important for teachers to reduce any negative aspects of relationships than it is to increase positive aspects of these relationships. An interesting and unexpected finding was that teacher–student relationships were even more important for older students than younger students. Further, in a more recent meta-analysis, Roorda et al. (2017) examined 189 studies and found that engagement acts as a significant mediator between affective student–teacher relationships and student achievement. This finding held across grade levels, but the direct association between positive relationships and engagement was stronger in middle and high schools than in elementary schools.

Since the quality of teacher–student relationships decreases as students get older (Furrer & Skinner, 2003), and teacher–student relationships are highly related to engagement and achievement for older students, teachers of adolescents and the school structures that support them have to work harder to build these relationships than do their elementary school counterparts. One challenge with teenagers is that getting along well with

one's teacher is not considered as “cool” as it is among younger children. Additionally, the time students have with each of their teachers decreases as they have different teachers for different classes. While some younger students may see one or two teachers during the day, older adolescents can see six to ten teachers who may vary from one semester to the next. In addition to the shorter chunks of the time these teachers have to get to know their students, the sheer quantity of students—sometimes numbering in the hundreds—may be daunting. Teachers of adolescents need to actively get to know their students personally and model caring behavior, and interventions aimed at boosting these relationships must acknowledge and accommodate the significant constraints these teachers face.

Teacher support, demonstrated in a teacher's caring, dependability, and friendliness, has an impact on students' interest in and enjoyment of their schoolwork (Skinner & Belmont, 1993) and may play an even larger role in motivation for adolescents than for elementary school children. For example, Ryan and Patrick (2001) found that during the transition from seventh to eighth grade, students who perceived their teacher was supportive and promoted interactions and mutual respect had greater positive changes in motivation and engagement than students who did not perceive themselves as having a supportive teacher. Interactions between teachers and students in a classroom can also make the difference between a friendly, safe space characterized by encouragement and recognition for trying, and an unpleasant negative space filled with criticism and insults (Anderson et al., 1988). Teachers can build personal relationships with students by sharing information about their hobbies and interests, or by seeing and connecting with students and parents during school functions such as sports, academic competitions, or cultural events.

Positive Behavior Systems Although many secondary schools focus on consequences for poor behavior, excessively harsh and punitive discipline policies decrease students' connectedness to school (Hagan & Foster, 2012; Gregory et al., 2016), which negatively affects their engagement in school and learning. This is espe-

cially true for minoritized students who often experience harsher discipline policies than do white students for comparable offenses (Anyon et al., 2014; Ritter & Anderson, 2018; Rocque & Paternoster, 2011).

Positive behavior interventions and supports (PBIS) is a framework to improve school climate through strategies such as setting school-wide expectations for behavior, teaching expectations and rules to the students, acknowledging good behavior, using data for decision-making, and providing administrative and district support (Swain-Bradway et al., 2015). Many districts around the country have adopted this framework in response to increased demand for evidence-based practices (Kittelman et al., 2019). School teams in secondary schools can decrease the use of harsh punishments by using PBIS or other positive behavior systems and improving classroom management. Supporting good classroom management is especially important since students present fewer behavior issues when there are set routines and fair consequences for poor behavior (Blum et al., 2002). When teachers' response to poor behavior is both fair and predictable, students feel they have some control over how they are treated. Further, established school and classroom routines can make students feel secure in knowing what they can expect out of their school day. One important step a school team can take is to institute school-level classroom management guidelines to be implemented across teachers and classrooms so that students do not face different behavior expectations in different classrooms.

While PBIS has been shown to reduce suspensions and promote positive student outcomes (Bradshaw et al., 2010, 2012), many scholars also caution against relying solely on PBIS. Without culturally responsive adaptations and proper teacher training to accompany PBIS, racial disparities may perpetuate themselves (McIntosh et al., 2014), and scholars recommend further research into which specific adaptations best reduce disparities and increase engagement (Gregory & Skiba, 2019).

Restorative Practices Since the development of the Restorative Practices Intervention in 1999,

there has also been a push for schools to use more restorative practices that focus less on discipline and more on building relationships and improving school climate. There are 11 “essential Elements” of restorative practices, with one being the use of a restorative “circle.” These circles can be large or small and are used to bring individuals (students, teachers, administration) together to set expectations for behavior, resolve conflicts, or respond to inappropriate behavior. Adults are also taught to reduce shaming the students, using questioning to support students thinking about problems rather than reacting to them, and allowing for student input. In a study of 29 high school classrooms, Gregory et al. (2016) found that student-reported implementation of restorative practices related to higher perceived teacher respect and fewer misconduct referrals issued to Latino-African American students. In a review of studies on restorative practices, Velez et al. (2020) stated that although restorative practices offer a lot of potential and have shown to influence improvements in teachers feeling more connected to students and promote a sense of school belonging among students, implementing them can be complex and very dependent on the dynamics and interpersonal relations of particular schools. And as with PBIS, restorative practices without targeted attention to issues of racial inequity may perpetuate disparities and lessen the potential benefits of interventions (Gregory et al., 2018).

Positive Reinforcement Teacher teams should also develop opportunities to positively reinforce good behavior and improvements in attendance, behavior, and grades over a set period. Extrinsic rewards can provide motivation for tasks students do not find motivating for their own sake (Cameron et al., 2001; Deci et al., 1999). In one of our own studies, students who reported liking receiving recognition (I feel proud when I am recognized as a good reader) and good grades for reading (Getting good grades in reading is important to me) also reported more reading behavior and reading engagement (Davis et al., 2020). However, extrinsic rewards could negatively

impact motivation in some circumstances, especially if rewards are seen as manipulative rather than informative (Cameron et al., 2005). Further, students who receive rewards or excessive praise for activities they would already do, such as receiving straight As or having perfect attendance, may realize that what they did was extraordinary compared to other students and may try less hard the following semester. Also, if students feel that the rewards are unattainable or given in an unfair way, motivation can decrease. Therefore, teacher teams need to think carefully regarding how and when to give out rewards or praise.

Small Learning Communities Another strategy to connect adults and students is to encourage small learning communities (SLCs). Creating smaller communities makes it easier for teachers who share students to monitor student engagement and create personalized interventions to mitigate disengagement. By sharing their experiences and successes with particular students, they can identify the teacher each student connects with most easily. Also, the teacher with the most connection with each student can share strategies that have worked well for that individual student. Further, after the best team member to be an advocate for each student is identified, that team member can check in regularly with the student to make sure he or she is keeping up with schoolwork. In this way, an SLC becomes a smaller school within a school, encouraging higher quality relationships between adults and students. Since the optimal school size for increasing school connectedness is fewer than 600 students (Blum et al., 2002), creating SLCs and ninth-grade academies can give a large school a small-school feel.

The use of small learning communities can have a positive effect on attendance, behavior, and course performance. Authors of the U.S. Department of Education report on preventing dropout in secondary schools (Rumberger et al., 2017) reviewed eight studies showing moderate evidence for the impact of small learning communities on student outcomes. They found

that SLCs decreased student dropout rates and had positive effects on high school graduation.

Report Card Conferences Another strategy school teams can use to increase adult-to-student relationships in their schools, and one encouraged in the Early Warning System literature (Davis et al., 2018; Mac Iver et al., 2019), is the use of report card or progress report conferences. During these conferences, each student in a grade meets with an adult advisor who is not one of his/her current teachers. In some schools, other school personnel volunteer as adult advisors (e.g., teachers from other grades or other school staff), while other schools bring in trusted community members, such as retired teachers, faculty from a nearby college, or adults from a local community center. The adult and student discuss the student's grades to determine the next steps and goals. Ideally, schools try to have these conferences three to four times a year, maintaining the same adult-student pairs each time. This ensures that all students in the target grade receive consistent encouragement. In our recent study of promotion coaches, we found schools that implemented two or more report card conferences with ninth-grade students had significantly higher student attendance than those that implemented one or less conferences (Davis, 2019).

Building Connections with Peers

Not only do connections with adults in the school matter, but secondary students who feel supported by their peers feel more comfortable and connected to their school (Allen et al., 2016; Juvonen et al., 2012), put in more effort (Wentzel et al., 2017), and have a greater academic achievement (Juvonen, 2006). As a part of feeling welcome at school, whether in person or online, students need to know that the students in their classes care whether they show up and encourage them to do well. Students who have many friends usually report feeling connected to their school, while those with few friends in school often feel disconnected (Juvonen et al., 2012). Peers have a strong influence on how students view school and

their affiliation with it (Faircloth & Hamm, 2005). Socialization is even more important for adolescents than for younger students (Juvonen et al., 2012). Students, especially shy or less social teenagers, may find it difficult to make these connections in classrooms, especially when they do not see the same peers throughout the day. It is important that students not only make friends in school, but also have positive experiences with peers from other races, genders, and religions. Teams need to brainstorm ways to increase the amount of positive, supportive, and diverse peer relationships among students in their schools. More information on the importance of peer relationships for motivation and engagement with school can be found in this handbook (Knifsend et al., 2021).

Extracurricular Activities One way to build student interactions is through shared interests and affiliations. Teacher teams can support these interactions through group structures such as sports teams, arts activities, student government, robotics clubs, and debate teams. If students are left to organize friendships and organizations without school support, there is a chance that some will be left out. Some educators may see these groups as secondary in importance to instruction or as taking up the energy and time that students should be investing in academic pursuits. However, we believe that as important as it is for students to focus on instruction and complete their schoolwork, they still need to feel a connection to their school and to their peers for instruction to be effective. These activities are particularly helpful to connect students to others with similar interests and life goals. For example, students in an art club for future artists will be able to connect with others who share similar goals. Students can encourage each other and share information, for example, regarding colleges or competitions.

Students who participate in extracurricular activities tend to perform better academically than those who do not. For example, Darling et al. (2005) examined data from six California high schools in a longitudinal analysis and found that students participating in extracurricular

activities showed improved grades, attitudes toward school, and academic aspirations. Although extracurricular activities have been shown to improve student outcomes, teachers and administrators may view these activities as a reward for high performance or consider that only students who can handle their schoolwork have time to give to these activities. However, we argue that students who are struggling in school may also be suffering from low levels of belongingness, and therefore may become more motivated in their academics if they are given opportunities to build positive peer connections. In this way, students who teachers may be tempted to “bench” from extracurriculars may actually have more to gain from these activities than those who are doing well.

Many reviews have been written on outcomes of extracurricular activity involvement. Holland and Andre (1987), in a review of studies prior to 1987, found that participation in extracurricular activities was correlated to greater self-esteem, involvement in political activities, academic ability and grades, educational aspirations, feelings of control, and lower delinquency rates. Feldman and Matjasko’s (2005) review found that school-based structured activities, in contrast to unstructured activities, were associated with positive outcomes such as better academic performance, lower dropout rates, higher self-esteem, and reduced delinquent and antisocial behavior. However, research at that time also indicated that such participation could be related to poorer outcomes if the number of activities or the amount of time invested exceeded a certain threshold. Farb and Matjasko (Farb & Matjasko, 2012) built on the previous review to explore how breadth, intensity, and duration affect the benefit of extracurricular activities, specifically examining an “overscheduling” hypothesis. They found positive outcomes in proportion to the time spent in organized activities, up to a specific point at which there were diminishing returns.

Prosocial Skills Students who are prosocial are more successful in school. In one of our own studies, we found that students in grades 5–8 who were more prosocial in regard to reading (e.g., “I

like to help my classmates understand what they have read”) were more likely to report higher reading behavior, engagement, and achievement, while those who reported being antisocial (“My friends and I laugh at classmates who do not read well”) were likely to report lower levels of reading behavior, engagement, and achievement (Davis et al., 2020). Students, however, may not know how to interact with each other in these healthy ways. School teams need to determine how and when they can teach their student’s prosocial skills such as conflict resolution, clear communication, negotiation, appropriate manners, problem-solving in difficult situations, active listening, managing stress, and self-control. Learning social competence can have positive long-term effects on school bonding.

This is important because secondary students’ motivation and engagement in school can be influenced, in part, by teachers’ and peers’ expectations of prosocial behavior. For example, Wentzel et al. (2017) studied teachers’ and middle and high school students’ expectations for compliant and helping behavior. They found that perceptions of peer expectations for helping behavior and caring were related to effort to learn. If students receive consistent messaging that they should help one another and follow the class rules, they will expend more energy on their schoolwork.

Further, as adolescents near graduation, they start to think about possible future identities and consider how their future work will contribute to the world. Adolescents who understand how their schoolwork may lead to such purposeful work will be motivated to try harder. For example, Yeager and Bundick (2009) interviewed middle and high school students to determine the relationship between future work goals, purpose, and meaning. Work goals were categorized as either purposeful (i.e., students provided a reason for a particular work goal that would benefit the world) or self-oriented (i.e., students provided reasons that pertained to their own benefit from being in a particular career). Only 30% of students in their sample mentioned purposeful work goals during their interviews. Students’ responses were also

evaluated regarding their sense of purpose in life, sense of meaning in life, and meaningfulness in their schoolwork. Students who stated purposeful work goals in the interviews reported higher scores on the three measures of purpose and meaningfulness than students who did not report purposeful goals, even when controlling for demographics and type of career. The authors’ conclusion was that students with purposeful work goals may be more mastery-oriented because they are seeking knowledge to help others, rather than just grades.

Service Learning Another way to foster both prosocial behavior and peer connection is through service-learning opportunities. Service learning is the combination of academic learning and community service (Baker, 2019) that has the dual goal of strengthening student character and increasing student learning (Pak, 2018; Rossi, 2002). Students should not only participate in service-learning opportunities, both in school (peer tutoring, school beautification) and in their communities (environmental projects, assisted living facilities), but should also have time to reflect on what they learned during the experience.

Service learning that follows four recommended practices of “(a) linking programs to academic and program curriculum or objectives, (b) incorporating youth voice, (c) involving community partners, and (d) providing opportunities for reflection” (Celio et al., p. 66) has been shown to relate to student gains in “attitudes toward self, attitudes toward school and learning, civic engagement, social skills, and academic performance” in a review of 62 studies (Celio et al., 2011, p. 164).

Students also benefit from being asked to contribute ideas about what they could do to solve a problem in their community. It is especially helpful for a group of students to be challenged to work together to improve their community; for example, by forming an environmental club. Service learning can teach valuable lessons such as empathy, kindness, and social responsibility. When matched appropriately to students’ per-

sonal strengths, service-learning opportunities can also help them explore interests and possible careers.

Building Communication with Parents

Parents and the community can influence students' success in ways that teachers and peers cannot. Parents are often the support system students rely on for homework and those who set expectations for their children's school success (Boonk et al., 2018; Shute et al., 2011). Parents can be involved in their child's school experience in many ways including participation in educational activities at home (home-based: such as supporting homework), parents' interactions with their children's school (school-based: such as attending school events and parent-teacher conferences) and supporting their children's academic success by communicating developmental strategies (academic socialization: such as communicating the value of education) (Hill & Tyson, 2009). In addition to traditional conceptualizations of parental involvement, Huguley et al. (2021) found that African American families often engage in racialized parenting strategies such as advocating for systematic change to counteract racial inequalities and poor school quality.

Parents have a significant influence on their child's level of school engagement (Bempechat et al., chapter "Parental Influences on Achievement Motivation and Student Engagement", this volume; Bempechat & Shernoff, 2012; Reschly & Christenson, 2019). However, not all students have strong support at home, depending on family dynamics and circumstances. School teams should discuss how to connect with parents, sharing strategies and information they can use at home to help their children succeed and making them aware of opportunities and resources.

Regular Contact The first step in connecting with parents is to make school feel like a welcoming place for both students and their parents.

This can be challenging as some parents have negative memories of their own high school experiences or school experiences related to discrimination. Also, schools need to remove barriers that prevent minoritized parents from visiting and participating at their children's school (Kim, 2009). To make school a welcoming place, school staff need to make regular contact with parents and respond promptly when parents reach out to them. The first contact from the school to a parent should be positive; teachers should not wait until there is a problem to reach out. Regular contact can be maintained through emails or calls home to report good behavior as well as what students can do to improve (Kraft & Rogers, 2015). Parents should be invited to visit the school, as their schedules permit, e.g., to assist in the classroom or during school events or to attend after-school events or celebrations; schools should encourage an active parent organization. When possible, information should be translated as needed for families that do not speak English. Finally, when parents reach out for help, school staff should try to provide the support the parent requests without making him/her feel like a burden or less knowledgeable regarding his/her child's needs (Smith et al., 2020).

Parental Academic Support Parents' school advice and support to their children is often based on their own school experiences many years earlier. Some of these coping and learning strategies are not well adapted to current schooling (Räty, 2007). Parents' expectations for their children may be too high or too low, which can affect the level and quality of students' engagement in classes. School teams can plan training workshops to provide parents with skills and strategies to create a supportive learning environment, help their children complete homework, develop students' time management skills, communicate with teachers, manage behavior, and support pro-social practices at home (Ferlazzo & Hammond, 2009). To make it easier for parents to attend these events, schools should provide babysitting and transportation. Parents should be invited to share their own viewpoints and cultural norms during these events. Due to the level of coordina-

tion required to plan parental support activities and resources, the school may need to assign a staff member to serve as a parent and community liaison (Hill & Tyson, 2009).

Meeting Home Needs Students and parents often need help beyond academic support. Many families need resources for dental health, food access, GED opportunities, childcare options, job placement, or substance abuse support. School teams need to be aware of the resources available in the community so they can provide this information to parents as needed. Providing students with necessities like school breakfast and healthcare will increase their feelings of safety and belonging at school, which will lead to improved attendance (Baumeister & Leary, 1995; Mhurchu et al., 2013; Strolin-Goltzman et al., 2014). School teams can also share information about students to identify reasons why students are struggling. One teacher may perceive a struggling student as lazy and unfocused, while another may know more about what that student is going through at home and be more understanding. Discussing the student's situation in a team meeting can provide an opportunity to meet the family's resource needs and bring all team members to the same understanding of the issues facing the child.

Building Student Confidence

According to basic needs theory, which is a part of the larger self-determination theory, competence is one of three basic needs that must be met for someone to be motivated (Ryan & Deci, 2000). For students to be motivated to complete their schoolwork and engage in their classes, they need to feel like they can succeed if they try. Self-efficacy, defined as a person's perceived capabilities for performing actions (Schunk & Mullen, 2012), has a very strong relationship to both engagement and achievement (Schunk & Mullen, chapter "Self-Efficacy and Engaged Learners", this volume). In one study, we found that students in grades 5–8 who reported higher levels of self-efficacy (e.g., "I am one of the best readers in my class") were likely to report higher reading

behavior, engagement, and achievement, while students who reported that reading is challenging (e.g., "The books that teachers assign are often hard for me to read") were likely to report lower levels of reading behavior, engagement, and achievement (Davis et al., 2020, p. 438).

However, building the confidence of adolescents who may have spent many years in unsuccessful attempts to achieve school success will be difficult. For many, doubts about their ability to succeed in school undermine their effort and engagement in academics (Anderman & Maehr, 1994; Eccles & Midgley, 1989). Such students need a few big wins to believe that they have what it takes to succeed. They need both academic and emotional support. Teachers need to meet them where they currently are by matching instruction to the level of the learner, give them useful feedback they can use to improve, recognize and praise their early wins, and provide supports such as tutoring and extra classes to bring them up to grade level learning.

Matching the Level of Instruction to the Student

Matching the level of the instruction to the level of the student is a key component of Vygotsky's "zone of proximal development" (Vygotsky, 1978). This zone is that space between what students can do on their own and what they can do with full support from another. This sweet spot will be different for different students in each classroom. School teams must decide how to meet students where they are at their varying levels in learning. To meet this need for individualized instruction, teams can establish structures enabling students to receive focused extra help and encourage teachers to reteach topics when necessary and give students opportunities to resubmit work.

Focused Extra Help One way to match students' level of instruction is providing focused extra help outside the classroom. Many teachers provide one-on-one or small group assistance through coach classes during advisory periods or after school. In a meta-analysis study examining

the effectiveness of interventions to improve achievement of low SES students, tutoring, defined as intensive academic instruction, had the highest average effect size (0.36), compared to other interventions such as small-group instruction (0.24), computer-assisted instruction (0.11), and incentives (0.01; Dietrichson, 2017).

Second Chances Another way to provide extra help and decrease the emotional impact of a poor grade is for teachers to allow students to resubmit coursework and quizzes if they fail the first attempt, and to provide an opportunity to submit late work. This aligns to the recent emphasis on standards-based grading, which reflects students' mastery of skills rather than non-academic factors such as behavior and effort (Wisch et al., 2018). Teachers focusing on standards rather than traditional grades allow students to retake, revise, and redo assignments. Although some teachers strongly prefer one or the other extreme (traditional or standards-based grading), many fall somewhere in between. To examine the approaches teachers take and how these relate to their school policies, content area, and personal beliefs, Wisch et al. (2018) surveyed 429 teachers on mastery approaches to grading. They found that more than 90% of teachers implemented some redos or retakes in their classrooms; this occurred more often when teachers believed that a school-wide policy existed allowing late work and revisions.

Checks for Understanding and Helpful Feedback

Students who want to improve cannot do so without helpful feedback and support from their teachers. When students lack agency because they do not know how they can improve their learning and success, motivation and engagement will suffer. Helpful feedback not only tells students what to do, but it also helps students fix errors and provides them with new strategies to accomplish a task. In a meta-analysis of the effectiveness of interventions to improve low SES students' achievement, feedback and prog-

ress monitoring, including any intervention that provided either the teachers or students with information on development, had one of the highest average effect sizes (0.32); only tutoring had a greater effect (0.36; Dietrichson, 2017).

Grades The most common feedback secondary students receive from their teachers is in the form of grades, which are very important predictors of engagement. In an examination of National Longitudinal Study data from students in the eighth grade, You and Sharkey (2009) found that the previous achievement was the strongest predictor of engagement (effect size = 0.356) compared to other predictors such as gender, race, SES, parental expectations, self-concept, college aspiration, and having a friend drop out. The grades students receive not only trigger emotional reactions but also determine how much time and effort students will continue to invest in school. For instance, Poorthuis et al. (2015) examined secondary school students' reactions to fall report card grades and their engagement the following spring. Lower report card grades predicted lower levels of both emotional and behavioral engagement. The authors concluded that grades were both the outcome of engagement and a motivator for continued engagement. They also found that the relationship between grades and engagement was mediated by positive and negative affective reactions to their first report cards: grades that produced a positive reaction were associated with an increase in emotional and behavioral engagement, but grades that produced a negative reaction were associated with decreased emotional engagement.

Feedback Students are frustrated when they receive poor grades with little to no feedback from a teacher on what they did wrong or how they can improve. If students receive enough poor grades without feedback, especially if they tried hard to succeed in a particular task, they often conclude that they are just not competent enough to do well in a particular class; over time, they may decide that school is just too difficult. Hattie and Timperley (2007) reviewed 12 meta-analyses examining the influence feedback has

on student learning and achievement and found a high average effect size (0.79) of feedback on achievement. However, they noted that studies in which the feedback focused on a specific task, providing information on how to do it more effectively, had larger effect sizes on achievement than feedback that merely praised, rewarded, or censured a student. They concluded that feedback needs to be clear, purposeful, meaningful, and prompt.

One reason that feedback is such a strong predictor of achievement is its impact on engagement. In a large-scale observation of the UK primary classrooms, Apter et al. (2010) found that student on-task behavior during lessons was related to the frequency with which their teachers provided positive feedback. Sutherland et al. (2000) also examined the effect of praise on the engagement of students with emotional and behavioral disorders. Students' on-task behavior increased proportionately to behavior-specific praise.

Teachers can also raise or undermine students' self-efficacy through appraisals of their schoolwork. Usher and Pajares (2006) examined social persuasion, defined as encouragement students receive from significant others, as a means of raising students' self-efficacy in middle school students, finding that social persuasion accounted for 17% of the variance in self-efficacy for girls (though it was not a predictor for boys). This suggests that adolescent girls are more attuned to the messages they receive from teachers and other trusted adults than boys.

Giving Students Agency Over Their Learning

Students, especially adolescents, need to feel that they have some agency over their lives and their education (see also Reeve & Jang, chapter "Agentic Engagement", this volume). In self-determination theory, this feeling of agency is referred to as autonomy, which has been defined as "regulation by the self" and is compared to heteronomy, "regulation that occurs without self-

endorsement" (Ryan & Deci, 2006, p. 1557). According to the basic needs theory, which is a part of the larger self-determination theory, autonomy is one of three basic needs that must be met for someone to be motivated (Ryan & Deci, 2000). In a recent study, we found that a preference for autonomy, as it relates to reading, (e.g., "Choosing what I want to read is important to me") was significantly related to reading behavior, engagement, and achievement in grades 5–8 (Davis et al., 2020). However, adolescents are not often given agency in their education. In a recent study of 3300 high school students in the USA., only 41% reported feeling that they have a voice or power in their schools (Margolius et al., 2020). Further, Guthrie and Davis (2003) found that autonomy support for literacy (e.g., "My teacher lets me decide what science topic I should read and write about") was highest for third-grade students, lower for fifth-grade students, and even lower for eighth-grade students.

Student Choice

One way to increase autonomy is to allow students to make choices related to their learning. When students are given a choice (e.g., which book to read in ELA class), they take ownership in the choice and are more motivated to try hard than students who are not provided a choice (e.g., told which book to read) (Beymer & Thomson, 2015). The provision of choice relates to the outcomes such as effort, task performance, perceived competence, and preference for the challenge (Patall et al., 2008). Schools with a high percentage of low-income students often offer students less choice in learning than schools in wealthier districts (Duke, 2000; Flowerday & Schraw, 2000). Some teachers are reluctant to give their students choices for fear of losing control over the classroom (Flowerday & Schraw, 2000; Netcoh, 2017).

The provision of choice is one of the five components of motivational support in the Concept-Oriented Reading Instruction program (Guthrie et al., 2004). A study of this program found that support for motivation increased reading compre-

hension, motivation, and strategy use compared to students who received only strategy instruction or traditional instruction. Further, in a study on homework completion, Patall et al. (2010) found that students given a choice of homework options reported higher levels of intrinsic motivation, competency levels, and achievement on the unit test, compared to students who did not have a choice.

The way choice is offered may determine how effective it is. For example, in a review of research on choice, Katz and Assor (2007) found that providing choice is more effective when the choice is relevant to students' interests and goals, is not complex, does not offer too many options, and is congruent with the values of the student's culture. In a meta-analysis of articles related to the provision of choice, Patall et al. (2008) found that the effect of choice on intrinsic motivation was stronger when certain conditions were met: when participants were given two to four options, were children, and were not also offered an extrinsic reward for completing the task.

Merely providing choice to students may not be as effective as using choice along with other strategies to support autonomy. In reviewing articles on support for autonomy, Patall and Zambrano (2019) found that in addition to providing choice, teachers must also give a rationale that helps students understand the value of learning activities and seek out and validate students' perspectives during instruction. All three of these strategies increase students' feelings of autonomy. For example, Patall et al. (2013) asked high school students and their teachers to report on teacher practices and autonomy need satisfaction. Both the provision of choice and teacher attentiveness to students' perspectives were correlated to higher autonomy need satisfaction.

It may also be that some students benefit from the provision of choice more than others. For example, Patall et al. (2014) found that students with high levels of confidence are more motivated by choice than students with lower levels of confidence in a task. It may also be that those with low confidence, when provided a choice, will select the easier task. For example, Parkhurst (2011) examined if college students would select

to either complete an assignment that was already started, but had 10 more problems to finish, or start a new assignment that would be slightly less work with only nine more problems to finish. Instead of feeling motivated to finish the original assignment as might have been expected from past research on assignment completion (Hawthorn-Embree et al., 2011), most students in the Parkhurst study (77.6%) elected to do the easier assignment, showing that college students may be more likely to take effort into account over the drive to finish a particular assignment. The selection of completing a task was positively related to students' value of hard work; students who valued hard work were more likely to select to finish the higher effort assignment. Therefore, the provision of choice may benefit those with higher confidence and those who value hard work compared to those with less confidence and hold hard work in less value.

Building Connections to Careers

Another way to build a student's feelings of agency in school is by helping them explore future careers. This enables students to select courses that will help them in their life beyond high school, rather than taking courses just because their parents or counselors suggest them. In addition, when students have a career goal in view, their classwork becomes more meaningful as a steppingstone to their future success. Students become motivated to do well because it matters to their personal goals, rather than to please a teacher, parent, or other external influencer. This can be seen in a study on work-based learning by Kenny et al. (2010), who found that students with "work hope," defined as students with goals for future employment, a plan for obtaining it, and confidence that they will do well in it, had higher levels of academic efficacy, mastery goals, and understanding of the relevance of school for future success.

Career preparation is significantly related to student engagement and grades for secondary students. Using structural equation modeling on survey responses of secondary students, Perry

et al. (2010) found that career preparation (a combination of career decision-making self-efficacy and career planning readiness) had a significant direct effect on school engagement (defined in this study as identification with school and behavioral engagement) and a significant indirect positive effect on grades through school engagement. Further, Kenny et al. (2006) examined student engagement over time and found that higher levels of career planning and expectations at the start of ninth grade were associated with increased engagement (defined in this study as belonging and valuing) during the year. In our own study, we found that for ninth-grade students, the amount of career focus in a school (e.g., “This school has really helped me understand the jobs or careers that fit me best.”) was related positively and significantly to interest in schoolwork (e.g., “I think that what we are learning in my classes is interesting”), self-efficacy for schoolwork (e.g., “If I try hard, I believe I can do my schoolwork well”), and effort (e.g., “If I don’t understand my schoolwork, I keep trying until I do”; Davis et al., 2015). Career focus was negatively correlated to disengagement (e.g., “I cut class or skipped school”) and giving up interest (e.g., “I don’t really care about school”).

Career Explorations and Experiences In the mid-to late 1990s, the School-to-Work Opportunities Act (STWOA) provided funding to states and school districts for programs that would support high school students in job selection and preparation. However, since the act expired in 2002, many high schools have offered less career exploration, instead preferring to focus on academic study and college preparation. Some may have worried that presenting both vocational and college options might confuse students who should be aspiring to attend college. Or perhaps they feel that vocational courses could pull lower performing students into low-paying vocational tracks and away from higher paying career options. In any case, school counselors do not have the time or resources to provide career exploration and experiences for all of their students. However, an examination of STW programs found that students in career explora-

tion programs, including job shadowing, mentoring, and tech prep opportunities, were *more* likely to take college entrance and advanced placement exams than those not participating in these programs (Visher et al., 2004), indicating that these programs did not deflect students from applying to college. In addition, participating students were more likely to graduate from high school, enroll in college, and attend a 2-year rather than a 4-year college; this strongly suggests that these programs encouraged students to attend college who would not have otherwise done so.

Use of Success Mentors Adult and peer role models are necessary to help students develop career goals. In a study of ninth-grade urban students, Kenny and Bledsoe (2005) found that social support from family, teachers, and peers contributed to career outcome expectations. Further, Perry et al. (2010) found that both parental career support and teacher career support had significant direct effects on career preparation and significant indirect effects on engagement, through career preparation.

College-educated adults serving as mentors help increase students’ aspirations for postsecondary education and training. One recommendation of the U.S. Department of Education practice guide on helping students navigate the path to college by Tierney et al. (2009) is to “surround students with adults and peers who build and support their college-going aspirations” (p. 26). Studies reviewed found that factors with the highest impact on college enrollment included mentoring services. In these programs, students regularly met one-on-one with college-educated adults who helped them with college guidance and preparation. The guide suggests that schools consider using near-peer mentors: recent high school graduates who were enrolled in college.

Putting It All Together

In this chapter, we reviewed ways in which schools can track student engagement and actions they can take to get secondary students who have become disengaged in school back on track.

Student engagement in middle and high school is important for both their success in school, which leads to graduation, and their postsecondary success. Those who become disengaged during their secondary schooling will limit their options for future careers and earning potential.

The first step in getting students back on track is to track engagement. Although it is very easy for teachers and administrators to focus on the students who are the most disruptive, only through tracking indicators, such as attendance, behavior, and course performance can educators see who needs support before they get too far behind. If data is tracked regularly and interventions are assigned, they may be able to catch a student mid-quarter rather than at the end of the year when little to nothing can be done.

The next step is implementing interventions. We suggest interventions that have been used to successfully increase secondary student school engagement. Each set of recommended interventions is based on one of the three basic needs from the self-determination theory. The first set of interventions are those that increase relationships in their school. These interventions, such as those that strengthen teacher–student, peer–peer, and school–parent connections, have shown to increase student engagement. The second set of interventions are those that increase students’ feelings of competence and include matching the level of instruction to the student, afterschool tutoring, and informative adequate feedback. Finally, the last set of interventions are those that support student agency and autonomy over their own learning. These include providing student choice and helping students explore careers.

Interventions should be tiered in that they apply both individual student interventions (Tier 3) such as a phone call home or discipline tracking sheet as well as interventions that apply to groups of students (Tier 2) such as tutoring groups, or interventions for whole-school reforms (Tier 1) such as changing disciplinary practices for the whole school or implementation of job explorations for a grade. Since there is only so much a school can do, they will need to prioritize based on the school’s specific population and needs. For example, some schools may select one

Tier 1 goal each month, such as building teacher–student relationships or integrating into job explorations. However, this is a large undertaking for a school, especially those that are under-resourced. Below are strategies we have used to make this work doable within a school.

We began this chapter by considering the importance of using school teams to track engagement and implement interventions. We then explored interventions that school teams can use to increase engagement. However, this is a large undertaking, especially for under-resourced schools. Below are strategies we have seen used to make this work doable in such schools.

Organizing a team The work is too much for one individual. In our research, we have seen Early Warning Indicator teams used to track student data, organize team meetings, and identify, implement, and monitor interventions (Davis et al., 2018; Mac Iver et al., 2019). School teams often consist of core teachers (math, science, English, and history) and an administrator. Some teams have included other school personnel, such as elective and special education teachers, school behavior specialists, guidance counselors, sports coaches, volunteers, and school nurses.

Community partners School teams may need external help to begin or maintain the process. Teams can reach out to community organizations to help with report card conferences or as career mentors. Teams should create a list of partners that can help families with job placement, financial support, and other needs.

Networking As more school teams focus on engagement, it is helpful for teams to meet and share information, strategies, and best practices. From our work with supporting districts and states in implementing early warning systems (Davis, 2012; Mac Iver & Balfanz, 2021; MDRC, 2015), we have seen firsthand the power of connecting adults doing similar work in different schools, or even within schools to share learnings and work collectively to solve common problems of practice. Teachers are more often willing to adopt new practices when they hear from a peer

that it works. Participants in the multiple networks in the Everyone Graduates Center have organized a number of networks such as the network of Diplomas Now schools and the ECHO EWS network in New Mexico. These groups report that networking enabled them to see that they were not alone, that they were not the only ones struggling with an issue or a challenge, and that they had good ideas to share with others, which increased their sense of agency in increasing student engagement.

Conclusion

In conclusion, as we have stated, although it takes a great deal of dedication and organization, school teams can both accurately track student engagement and effectively implement interventions to get students back on track to graduation and postsecondary success. Interventions should focus on one or more of the three basic needs from the self-determination theory that are related highly to motivation and engagement: relatedness, competence, and autonomy. Schools and students will likely see the most benefits if they implement several interventions that align with each of these needs in tandem.

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