Middle School Matters Field Guide:
Research-Based Principles, Practices, and Tools

Chapter 2: Student Supports That Enhance Learning
Dropout Prevention

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Dropout Prevention

Five research- and evidence-based[1] principles have been proven to reduce the risk of students' dropping out or disengaging from school. First, specific indicators should be identified and data should be collected and monitored to understand changes in student performance, attendance, and engagement in school. Second, at-risk students should be paired with an adult advocate who is committed to their success. Third, students should take advantage of personal tutoring and develop study skills to improve their confidence in their own academic potential. Fourth, schools should use programs that recognize improvement in behavior and academic achievement, as well as those that teach strategies for healthy behavior and academic progress. Fifth, schools should find ways to enhance academic achievement by personalizing the learning environment so that it feels smaller, more intimate, and more conducive to focused learning, and so that staff can connect with students more frequently.

Principle 1:

Use data systems to help identify students who are at risk of falling off the path to high school graduation.

Identifying a set of research- and evidence-based indicators that predict which students might be at risk of dropping out and then regularly analyzing data relative to these indicators are the critical first steps in identifying at-risk students who should be considered for extra services or supports.

Practice 1: *Use data to identify incoming students with histories of academic problems, truancy, behavioral problems, and retention.*

Student absences, grade retention, low academic achievement, and behavior problems are key indicators that students are more likely to drop out.[2, 3, 4, 5, 6, 7, 8, 9, 10, 11] Schools should review data for incoming students on their attendance, grade retention, disciplinary issues, and weak academic performance. Schools should also review information from previous teachers about students' motivation, academic potential, and social skills, as well as any instructional challenges the teachers encountered. Since elementary school teachers have regular interaction with their students, collecting information from prior teachers is likely to be especially useful for incoming middle grades students. School leadership teams and teachers can monitor data at the grade-, classroom-, and student-level to examine how many and which students are chronically absent (missing more than 20% of school days), have disciplinary placements, and/or did not meet the state assessment standard in the prior year. Schools can analyze this data to identify patterns and trends, and then systematically act on the information using research- and evidence-based programs and policies.

The National High School Center provides resources and tools that schools can use to develop their own early warning systems.
http://www.betterhighschools.org/ews.asp

Practice 2: *Continually monitor the academic and social performance of all students.*

Schools should monitor students' progress by regularly reviewing report cards, test scores, and discipline referrals. Schools can then use these data to identify students who may have recently experienced a life event, academic challenge, or other social or behavioral problem that could foreshadow a higher risk of dropping out.[11, 12] Schools should designate a staff member or team to regularly monitor data and follow up with students when needed. Follow up could be done through student advisories or adult advocates (see Principle 2).

Practice 3: *Monitor students' sense of engagement and belonging in school.*

Collecting data and monitoring the school climate and teacher-student interactions will help identify areas for improvement. Schools can survey students periodically or conduct small group interviews to learn about students' perceptions of the school climate and their sense of belonging and engagement.[13, 14, 15] This data can help identify whether current efforts are effective in improving school climate and engagement, and where to focus reform efforts (if needed).

Sample surveys for collecting data on student engagement and motivation can be found in a report available at
http://ies.ed.gov/ncee/edlabs/regions/southeast/pdf/rel_2011098.pdf

Principle 2:

Assign adult advocates to students who are at risk of falling off the path to high school graduation.

Students' personal and academic needs should be addressed through a meaningful and sustained relationship with an adult.[16, 17] The adult should be responsible for addressing the student's academic and social needs, communicating with the student's family, and advocating for the student. The adult advocate should be thoroughly trained prior to being assigned a student, and the adult and student should have time to meet regularly.

Practice 1: *Select adults who are committed to student success.*

An adult advocate should be assigned to work individually with students who are at a high risk of dropping out and have been identified through a process, such as the one described in Principle 1. The advocate is a case manager who should interact with the student, offering guidance and support on matters inside and outside of school, modeling positive behavior and decision-making skills, and being an encouraging and trusted person in the student's life.

The adult advocate could be a teacher, community member, or social worker. He or she should be based primarily at the school and should be persistent, believe in the ability of all students to succeed, be willing to work cooperatively with families and school staff, and be skilled in advocacy and communication.[16, 17]

Practice 2: *Keep caseloads low.*

The programs that have been studied kept caseloads for adult advocates low (under 20). Moving to larger caseloads would have unpredicted effects, and larger caseloads preclude advocates from spending meaningful time engaging with students and resolving issues.

Practice 3: *Match students with adult advocates purposefully.*

Purposefully matching students and adults increases the likelihood that the relationship will thrive. Matches should take student needs into account so that the adult can effectively advocate on the student's behalf and adapt activities according to the student's interests and goals.[17, 18, 19] It is important to provide advocates with whom students can identify: advocates should reflect the cultural and ethnic diversity of the students they are mentoring for greater success.[16]

Practice 4: *Provide training to advocates on working with students, parents, and the school staff.*

Training should be provided to adult advocates so they can work with students, parents, and school staff to reduce dropout rates. Training should include an overview of resources available for students and their families and strategies for communicating with both students and families to better understand their needs in order to connect them to appropriate resources.

Examples of activities adult advocates should be trained in include (i) assisting students in overcoming obstacles ranging from transportation to school to poor relationships with teachers, (ii) helping students develop career goals and postsecondary plans, (iii) working with students on academic progress by monitoring the completion of homework assignments, and (iv) working with teachers to learn about students' academic difficulties. Advocates can also help a student's family by referring a parent to potential jobs or school training programs, or by making appointments with or providing transportation to support service agencies.

Practice 5: *Establish a regular time in the school day or week for advocates to meet with students.*

Consistent meetings between the advocate and the student provide accountability and allow the advocate to give guidance or praise successes.[20, 21] The amount of time needed for meetings depends on the severity of the student's problems; some students need the structure of daily meetings, while others may need only weekly meetings to stay on track.

More information about the use of adult advocates can be found at
http://www.checkandconnect.org/

Principle 3:

Provide academic support and enrichment to improve academic performance.

Providing academic support, such as tutoring or enrichment programs, helps address skill gaps and enriches the academic experience for students who may be bored or disengaged. Academic struggles may play a role in students' feeling alienated from school, so incentives, such as leadership opportunities in academic areas or rewards for improved performance, may help increase academic and student engagement.[16, 22, 23, 24]

Practice 1: *Provide individual or small group support in test-taking skills, study skills, or targeted subject areas, such as reading, writing, or mathematics.*

Academic support may be one-on-one or small group interactions and can include test-taking and study skills or enrichment courses. About 10–12 weeks long, enrichment courses target a particular subject area, such as reading, writing, or mathematics, and include teaching strategies designed to engage students (e.g., whole class discovery lessons or differentiated individual and small group instruction).[25, 26] Academic support can be provided by adults or peers and can occur during advisory periods, at lunch, or during study skills periods built into the schedule.

Practice 2: *Provide extra study time and opportunities for credit recovery and accumulation through after-school, Saturday school, or summer programs.*

After hours and summer school programs address several primary academic needs of at-risk students, including providing support during the transition from middle grades to high school. These programs can also monitor credit accumulation and provide academic enrichment aimed at increasing student engagement. In after hours or summer school programs, students can work closely with teachers individually or in small groups to complete the coursework or credits[26] they need to catch up. These programs also help students hone the academic skills they need for future academic success.

Schools can also provide summer school enrichment programs to increase engagement. During the program, which may last between 4 and 6 hours per day for 4–6 weeks, students are exposed to a variety of experiences that target key academic areas, such as mathematics, science, or reading.[27]

Principle 4:

Implement programs to improve behavior and social skills.

Schools can help students identify, understand, and self-regulate their emotions and interactions with peers and adults. Doing so can help mitigate problematic and disruptive behaviors both in and out of the classroom as students learn how to interact and communicate positively. This type of skill development also helps students consider the long-term consequences of their actions.

Practice 1: *Use adult advocates to help students establish attainable academic and behavioral goals.*

Adult advocates (see Principle 2), mentors, teachers, or counselors can help students set realistic goals for interacting with peers and teachers at school, progressing academically, or improving in other areas.[16] Students can take responsibility for their behavior by setting personal benchmarks such as "turn in daily homework" or "attend all classes in a week."

Practice 2: *Recognize student accomplishments.*

Students should be provided with frequent positive rewards and recognition for accomplishments based on their progress towards goals. Teachers should hold recognition ceremonies and make calls home to acknowledge students' meeting goals, improving attendance, or completing exceptional schoolwork.[16, 28]

Practice 3: *Teach strategies to strengthen problem-solving and decision-making skills.*

Problem-solving or decision-making curricula can be integrated with existing curricula, or students can participate in a life-skills course. Students should be targeted for participation in small group seminars, possibly facilitated by adult advocates or other staff teams during advisory periods, to help them develop these skills.[1, 16, 17, 29, 30, 31, 32, 33, 34] Topics should include problem recognition and evaluation, goal setting, planning and organization, anticipating roadblocks, and controlling anger and expressing emotion. Emphasis should be placed on developing cooperative learning skills and positive relationships with staff, teachers, and students.[27]

Practice 4: *Establish partnerships with community-based program providers and other agencies, such as social services, welfare, mental health, and law enforcement.*

External factors may be the root cause of problematic classroom behavior and/or low achievement. Coordination with community-based program providers, social services, child welfare, and law enforcement agencies will help students meet needs outside of school.[16, 27, 34, 35]

PRACTICE 4 EXAMPLE APPLICATION: Behavior Program (Larson & Rumberger, 1995)

The Achievement for Latinos through Academic Success (ALAS) program initially was developed and tested in a heavily Latino middle school in Los Angeles and showed significant effects in reducing dropout rates. ALAS students received 10 weeks of problem-solving instruction and two years of follow-up problem-solving prompting and counseling, along with school survival problem-solving instruction. Key themes of the ten-week course were teaching students how to do the following:

- Recognize when a problem first begins.

- Identify and define problems clearly.

- Control impulsive reactions.

- Overlook irritations that are best ignored.

- Identify emotions.

- Set clear and realistic goals for the short- and long-term.

- Evaluate one's own competence for solving a problem.

- Think of a variety of potential solutions.

- Develop a step-by-step plan.

- Anticipate the roadblocks and pitfalls when taking action.

- Be assertive and socially appropriate when facing peer pressure or criticism.

- Sustain persistence and effort when frustrated.

- Control anger and express emotions appropriately and effectively.

Principle 5:

Personalize the learning environment and instructional process.

A personalized learning environment is one in which students and teachers know one another.[24, 26] In this type of environment, the more extensive personal interaction allows teachers to get to know each student's strengths and preferred way to learn. Students who interact with teachers more often will feel more engaged in learning.

Practice 1: *Implement team teaching and smaller classes.*

One way to provide more teachers per student is to pair teachers in the same classroom, which provides for common lesson-planning and decision-making[36, 37] and gives students access to more than one teacher who can offer individualized attention or new perspectives. Smaller classes are another way to support more teacher-student interaction.[36, 37] While there is no research to indicate whether any particular class size is optimal for middle grades, smaller classes will generally be advantageous to some extent, assuming teachers take advantage of the relatively small teacher-student ratio and time afforded to them to address individual student needs.

Practice 2: *Use the school schedule to create extended time in the classroom.*

Implementing block scheduling, extended class periods, or advisory and study periods provides more time for student-teacher and student-student interactions during the day.[26, 36, 37] Students also have the opportunity to explore topics in greater depth both in groups and as individuals working with the teacher.

Practice 3: *Foster after-school activities and encourage participation in them.*

Schools should encourage extracurricular activities, such as participating in sports, clubs, or after-school field trips; listening to guest speakers; forging postsecondary partnerships; or joining service groups. Research indicates that participation in outside activities helps create a stronger sense of engagement in the community, encourages students to connect with peers and teachers, and provides a setting in which creative activities can be pursued beyond the rigors of classroom instruction.[38]

PRACTICE 1 EXAMPLE APPLICATION: Small Learning Communities in the Middle Grades

The Talent Development Model incorporates the idea that innovative approaches to school organization and staffing can increase student efforts and teacher effectiveness.

Consistent with that philosophy, Talent Development schools establish separate learning communities of 200 to 300 students. These small learning communities are organized into vertical houses with teaching teams (two or three teachers) responsible for fewer than 100 students. This model also encourages schools to limit the number of different specialized teachers assigned to each student in middle grades (semi-departmentalization) and, when appropriate, has teachers stay with students for more than one grade level (looping).

The resulting small, stable learning communities are meant to—and do—encourage students, teachers, and families to establish strong bonds and caring relationships.

More information about the Talent Development middle school model can be found at
http://www.talentdevelopmentsecondary.com/

Conclusion

The principles and practices in this section draw heavily on the guidelines recommended in the IES practice guide for dropout prevention,[39] which itself draws on the intervention reports of the What Works Clearinghouse (WWC); as such, the evidence is generally drawn from effectiveness research that meets the WWC standards for validity. The principles summarized in this chapter are grounded in the most valid evidence available at the time this document was written: the authors reviewed the research literature that underpins the WWC intervention reports and practice guides and then tailored the recommended practices to the middle grades and to other principles laid out in the MSM Platform.

The principles presented here are state of the art, based on evidence-supported approaches effective in reducing dropping out. Many areas of education research suffer gaps, and dropout prevention is no exception. Investments in research on dropout prevention occurred in the 1990s and tapered off as attention (and support for research) shifted in recent years to other topics related to the No Child Left Behind Act. A few prominent models to reduce dropout have emerged recently, such as Talent Development[37] and First Things First.[36] Generally, however, continuing large-scale experimentation to examine different approaches and programmatic strategies is lacking. Nonetheless, waiting for more to be known is ill advised. Dropping out continues to be common and needs to be addressed. Just as waiting for more evidence of effective medical treatments should not preclude using the most effective treatments currently known, we need to do what we can now for students who are disengaging from school.

References:
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1. Dynarski, M., Gleason, P., Rangarajan, A., & Wood, R. (1998). *Impacts of dropout prevention programs: Final Report*. Princeton, NJ: Mathematica Policy Research.

2. Battin-Pearson, S., Newcomb, M. D., Abbott, R. D., Hill, K. G., Catalano, R. F., & Hawkins, J. D. (2000). Predictors of early high school dropout: A test of five theories. *Journal of Educational Psychology*, *92*(3), 568-82.

3. Barrington, B. L., & Hendricks, B. (1989). Differentiating characteristics of high school graduates, dropouts, and nongraduates. *The Journal of Educational Research*, *82*(6), 309-319

4. Garnier, H. E., Stein, J. A., & Jacobs, J. (1997). The process of dropping out of high school: A 19-year perspective. *American Educational Research Journal*, *34*(2), 395-419.

5. Ensminger, M., & Slusarcick, A. (1992). Paths to high school graduation or dropout: A longitudinal study of a first-grade cohort. *Sociology of Education*, *65*(2), 95-113.

6. Jimerson, S. R., Anderson, G. E., & Whipple, A. D. (2002). Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychology in the Schools*, *39*(4), 441-457.

7. Alexander, K., Entwisle, D., & Horsey, C. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education*, *70*, 87-107.

8. Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology*, *82*(2), 221-234.

9. Morris, J. D., Ehren, B. J., & Lenz, B. K. (1991). Building a model to predict which fourth through eighth graders will drop out in high school. *Journal of Experimental Education*, *59*(3), 286-293.

10. Rumberer, R. W. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, *32*(3), 583-625.

11. Allensworth, E. M., & Easton, J. Q. (2005). *The on-track indicator as a predictor of high school graduation*. Chicago, IL: Consortium on Chicago School Research.

12. Neild, R., Balfanz, R., & Herzog, L. (2007). An early warning system. *Educational Leadership, 65*(2), 28-33.

13. Austin, G., & Bernard, B. (2007). *The state data system to assess learning barriers, supports, and engagement: Implications for school reform efforts.* Prepared for the EdSource California Education Policy Convening, Sacramento, October 19, 2007 (revised). Retrieved from https://www.researchgate.net/publication/228759102_The_state_data_system_to_assess_learning_barriers_supports_and_engagement_implications_for_school_reform_efforts

14. Chicago Public Schools. (n.d.). *Civic engagement and service-learning tool kit*. Retrieved from http://cps.edu/ServiceLearning/Pages/ToolKit.aspx

15. Willms, D., & Flanagan, P. (n.d.). *Tell them from me (TTFM).* Retrieved from http://www.thelearningbar.com

16. Larson, K. A., & Rumberger, R. W. (1995). ALAS: Achievement for Latinos through academic success. In Thornton, E. (Ed.), *Staying in school: A technical report of three dropout prevention projects for middle school students with learning and emotional disabilities*. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

17. Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1998). Dropout prevention for youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children*, *65*(1), 7-21.

18. McPartland, J. A., & Nettles, S. M. (1991). Using community adults as advocates or mentors for at-risk middle school students: A two-year evaluation of Project RAISE. *American Journal of Education*, *99*(4), 568-586.

19. Smink, J. (1990). *Mentoring programs for at-risk youth: A dropout prevention research report*. Clemson, SC: National Dropout Prevention Center.

20. Gunn, J. H., & King, B. (2003). Trouble in paradise: Power, conflict, and community in an interdisciplinary teaching team. *Urban Education*, *38*(2), 173-195.

21. Letgers, N. E., Balfanz, R., Jordan, W. J., & McPartland, J. M. (2002). *Comprehensive reform for 9 urban high schools: A talent development approach*. New York: Teachers College Press.

22. Wehlage, G. G. (1989). Dropping out: Can schools be expected to prevent it? In L. Weis, E. Farrar, & H. G. Petrie (Eds.), *Dropouts from school: Issues, dilemmas, and solutions*. Albany, NY: State University of New York Press.

23. National Research Council (NRC) (2002). *Scientific research in education.* R. J. Shavelson & L. Towne (Eds.), Committee on Scientific Principles for Education Research. Washington, DC: National Academy Press.

24. Quint, J., Bloom, H. S., Black, A. R., & Stephens, L., & Akey, T. M. (2006). *The challenge of scaling up educational reform: Findings and lessons from First Things First*. New York: MDRC.

25. Kemple, J. J., & Herlihy, C. M. (2004). *The Talent Development High School model: Context, components, and initial impacts on ninth-grade students' engagement and performance.* New York: MDRC.

26. Kemple, J. J., Herlihy, C. M., & Smith, T. J. (2005). *Making progress toward graduation: Evidence from the Talent Development High School model.* New York: MDRC.

27. Snipes, J. C., Holton, G. I., Doolittle, F., & Sztejnberg, L. (2006). *Striving for student success: The effect of Project GRAD on high school student outcomes in three urban school districts.* New York: MDRC.

28. Cardenas, J. A., Robledo Montecel, M., Supik, J. D., & Harris, R. J. (1992). The Coca-Cola Valued Youth Program: Dropout prevention strategies for at-risk students. *Texas Researcher*, *3*, 111-130.

29. LoSciuto, L., Rajala, A. K., Townsend, T. N., & Taylor, A. S. (1996). An outcome evaluation of Across Ages: An intergenerational mentoring approach to drug prevention. *Journal of Adolescent Research*, *11*(1), 116-129.

30. Allen, J. P., Philliber, S., Herrling, S., & Kuperminc, G. P. (1997). Preventing teen pregnancy and academic failure: Experimental evaluation of a developmentally based approach. *Child Development*, *68*(4), 729-742.

31. Sinclair, M. F., Christenson, S. L., & Thurlow, M. L. (2005). Promoting school completion of urban secondary youth with emotional or behavioral disabilities. *Exceptional Children*, *71*(4), 465-482.

32. Hecht, M. L., Marsiglia, F. F., Elek, E., Wagstaff, D. A., Kulis, S., Dustman, P. A., & Miller-Day, M. (2003). Culturally grounded substance use prevention: An evaluation of the Keepin' It R.E.A.L. curriculum. *Prevention Science*, *4*(4), 233-248.

33. Farrell, A. D., Meyer, A. L., Sullivan, T. N., & Kung, E. M. (2003). Evaluation of the Responding In Peaceful and Positive Ways (RIPP) seventh grade violence prevention curriculum. *Journal of Child and Family Studies*, *12*(1), 101-120.

34. Schirm, A., Stuart, E., & McKie, A. (2006). *The Quantum Opportunity Program demonstration: Final impacts.* Washington, DC: Mathematica Policy Research, Inc.

35. Harrell, A. V., Cavanaugh, S. E., & Sridharan, S. (1998). *Impact of the Children at Risk Program: comprehensive final report II.* Washington, DC: The Urban Institute.

36. Kemple, J. J., Snipes, J. C. (2000). *Career academies: Impact on students' engagement and performance in high school*. New York: Manpower Demonstration Research Corporation.

37. Kemple, J. J. (2004). *Career academies: Impacts on labor market outcomes and educational attainment*. New York: Manpower Development Research Corporation.

38. Black, A. R., Doolittle, F., Zhu, P., Unterman, R., & Grossman, J. B. (2008). *The evaluation of enhanced academic instruction in after-school programs: Findings after the first year of implementation*. (NCEE 2008-4021). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

39. Dynarski, M., Clarke, L., Cobb. B, Finn. J., Rumberger, R., & Smink. J. (2008). *Dropout prevention: A practice guide* (NCEE 2008-4025). Washington, DC. National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from
http://ies.ed.gov/ncee/wwc/pdf/practice_guides/dp_pg_090308.pdf