



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

Chapter 2: Student Supports That Enhance Learning Student Behavior and Motivation



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Student Behavior and Motivation

The mission of public schools is not only to impart academic knowledge to students but also to educate students to become productive, well-functioning citizens. Positive behaviors contribute to a student's success in school, while maladaptive behaviors prohibit learning. In fact, past research has found preliminary evidence that behavioral skills are not just important for the social development of students but that both positive and negative behavior shows relationships with academic outcomes.¹

Similarly, for students to succeed, they need to try to master their schoolwork and push through the difficulties they will encounter. Yet, the evidence is clear that the more years a student spends in school, the more their motivation to do so wanes. According to two Gallup polls of public school students, eight out of ten elementary students report high levels of academic effort even in the face of challenges, but just six out of ten middle grades students and only four out of ten high school students report the same.^{2, 3} These results signal changes in how students view their relationship to schooling as they age. It is in the middle grades that students tend to formulate an independent answer to the question, "Is schooling for me?" Some students conclude that, even when boring or hard, school is a place that will help them achieve important life outcomes. They have a sense that they belong there and are cared for and that if they try, they can succeed. Other students come to believe that school is largely an unpleasant and even sometimes hostile environment where they feel alone and unsupported. As a result, they seek to simply endure it for as long as they can with the minimum amount of effort and investment required. This internal decision on the value of schooling and their connectedness to it, as well as the subsequent decline in motivation through the middle grades, is greatly shaped and influenced by actions taken by middle schools. For example, the Gallup polls show large declines through the middle grades in the percentage of students reporting that they received recognition for "doing good schoolwork in the last week."^{2, 3} In short, at the very time students are looking for reaffirmation that schooling is for them, teachers start providing less regular feedback to students (i.e., that if they try, they will succeed and that adults in the school value their effort).

According to research, there are three key principles schools should implement to support student behavior, and there are three areas where schools can increase student motivation in the middle grades. What follows are descriptions of these principles, which are related to improved student outcomes, as well as specific practices—actions that schools can take to accomplish each principle. As appropriate, an illustration is provided to show how the practice might be implemented.

Principle 1:

Consistently teach, model, and recognize appropriate and positive academic and social behaviors across all classrooms.

By modeling, teaching, and encouraging appropriate behaviors, educators can significantly reduce students' antisocial and maladaptive behaviors that reduce and inhibit effective classroom instruction and student learning.⁴

Practice 1: *Modify and reduce maladaptive classroom behavior through consistent teaching, modeling, and recognition of positive classroom behaviors.*

A strong body of evidence at the elementary school level, and growing body of evidence at the middle grades level, suggests that maladaptive classroom behaviors, such as acting out, being disrespectful, and not paying attention, can be modified and reduced through consistent teaching, modeling, and recognition of more positive classroom behaviors.⁴

Maladaptive classroom behaviors can be reduced by teaching students how to appropriately and respectfully gain attention from adults and students, how to effectively participate in group activities (disagree without being disagreeable), and how to develop emotional awareness and self-regulation (learn to recognize situations or behaviors that lead to negative behaviors and have alternative strategies ready). The following table provides strategies.

Positive behaviors need to be taught like any other skill—by breaking them down into concrete, teachable steps, explaining to students the rationale for learning the skill, creating opportunities for guided and independent practice, prompting and cuing students about the use of the behavioral skills, and recognizing the effective use of the skills. In order for students to internalize the new behavioral norms, they need to be consistently taught and recognized across the classrooms students participate in. What follows are some sample topics for teachers to use with students to assist them in developing appropriate behavior skills.

STRATEGIES FOR DEVELOPING APPROPRIATE BEHAVIORAL SKILLS

A structured plan for academic instruction centered on developing behavioral skills is needed. Some recommended instructional strategies are provided in Table 1.

Strategy	Description
Introduce skill	<ul style="list-style-type: none"> Explain the specific appropriate behavioral skill to the students. Provide examples of why it is a school norm.
Provide clear steps	<ul style="list-style-type: none"> Break down the skill for appropriate behavior into a few concrete steps that can be modeled and practiced.
Model	<ul style="list-style-type: none"> Provide examples of how the skill is applied in different settings. Use role-play and stories to demonstrate the behavior you want to see.
Guided and Independent Practice	<ul style="list-style-type: none"> Provide time for students to practice the behavior independently and with other students through role-play guided by the teacher. Have the teacher provide feedback afterward.
Reminders	<ul style="list-style-type: none"> Provide a prompt to remind students to use their skill(s) whenever a situation arises.
Feedback	<ul style="list-style-type: none"> Provide feedback with specific information about the positive ways that students implemented the new skill. Make suggestions to move students toward improved mastery of the skill, if needed. (Over time, such prompts and encouragement can be reduced.)
Reinforce	<ul style="list-style-type: none"> As students continue to learn and apply new skills, periodically review and reinforce prior skills.

Source: Adapted from Epstein, et al. (2008)⁴

Table 1. Instructional strategies to help students develop skills for appropriate behavior

TOPICS FOR DEVELOPING APPROPRIATE BEHAVIORAL SKILLS

Teachers can assist students with developing appropriate behaviors by providing examples, guided practice, and feedback in the following areas:

- Gaining attention from the teacher in an appropriate and respectful manner
 - Gaining attention from peers in an appropriate and respectful manner
 - Taking turns sharing, communicating ideas, cooperating, and problem-solving during small group settings
 - Self-monitoring and self-managing one's social behavior and completion of academic work
 - Developing emotional awareness, tolerance, self-regulation of emotions, and personal responsibility
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Principle 2:

Provide classroom instruction in self-monitoring and regulation, academic organization and study skills, goal setting, persistence, and healthy behaviors.

Self-monitoring and regulation, academic organization and study skills, goal setting, persistence, and healthy behaviors have all been linked to academic achievement.⁴ In the past, students who developed these behaviors, often through home or out-of-school experiences, succeeded in achieving greater academic excellence. Since it is imperative that all middle grades students be on a path to high school and college- and career-readiness, it is important to provide all students with the opportunity to acquire these essential skills.

Practice 1: Teach academic and healthy behaviors that support success in school.

Provide entering middle grades students with learning experiences that explicitly teach academic organization and study skills, as well as self-monitoring and regulation. The content of the course can be organized around career exploration and college readiness, which then provides a context for teaching goal-setting and healthy behaviors (e.g., stress management, proper diet and sleep, etc.). For example, through a series of career exploration and goal-setting activities, middle grades students can take a self-assessment to show them a broad range of careers that match their interests. Students could then be asked to research the educational qualifications of these careers by using the Cornell note-taking method learned in class.

Practice 2: Embed the self-monitoring and regulation, academic organization and study skills, goal-setting, persistence, and healthy behavior skills into the academic courses students take throughout the middle grades.

For students to internalize the academic and healthy behaviors they are taught, the behaviors need to be applied throughout students' middle grades experience. Teams of teachers can work collectively during common planning periods to infuse reminders and explicit uses of the behaviors into students' core courses. Additionally, teacher teams or the entire school can collaboratively identify a small set of positive academic and healthy behaviors, and formally incorporate student progress in these areas into report cards or progress reports. Students who are identified as needing improvement in a given area should then be provided additional learning experiences.

Practice 3: Provide students with opportunities to practice and employ these skills through service learning projects, as well as high interest and participatory electives with strong cognitive content like drama, debate, and robotics.

One good way for middle grades students to develop important academic and healthy behaviors is through activities linked to their developmental needs, including activities for adventure and camaraderie. Service learning, in which teams of students participate in the design and execution of a service project, as well as electives that combine rich cognitive content with teamwork, performance, and tangible outcomes over relatively short durations (a few weeks or a month or two) are particularly well-suited for this task. What follows are types of opportunities and activities students can participate in to practice healthy behaviors.

PROVIDING STUDENTS WITH STRUCTURED HEALTHY BEHAVIOR OPPORTUNITIES

Many activities can be structured at school to engage students and allow them to practice healthy behaviors. A few suggestions are provided in Table 2.

Type of Opportunity	Description of Activities
High Engagement Electives	<ul style="list-style-type: none"> • Debate • Drama • Robotics • Chess • Other educational experiences that students can engage in and derive success from despite areas of academic weakness
Adventure and Camaraderie	<ul style="list-style-type: none"> • Group projects • Service learning opportunities • School improvement (facilities, morale, etc.): <ul style="list-style-type: none"> ○ Plant a garden ○ Plan a school spirit activity ○ Paint a classroom
Recognition for Achievement of Goals	<ul style="list-style-type: none"> • Development of class goals by students with teacher support • Development of goals related to behavior by students • Class recognition upon goal completion
Learning Organizational and Self-Management Skills	<ul style="list-style-type: none"> • Study skills and organizational skills (e.g., note-taking, time management, study strategies) taught and modeled by teachers • Positive social skills and conflict resolution modeled by teachers and practiced by students through role-play

Source: Adapted from Balfanz (2009)⁵

Table 2. Opportunities to practice healthy behavior while building on student strengths and interests

Principle 3:

Establish processes for identifying problem behaviors early, diagnosing their causes, identifying effective interventions, applying the interventions at the scale and intensity required, and monitoring their effectiveness.

The earlier problem behaviors are identified and understood, the more likely that an intervention will succeed. If schools do not have a well thought-out process for early identification that matches interventions to student needs and monitors them for effectiveness, student supports tend to be ad hoc, uncoordinated, driven by triage, and, as a result, both expensive and ineffective.

Practice 1: *Implement an intervention framework generalized to student attendance, behavior, and course performance.*

Effective intervention frameworks will include whole-school prevention programs, targeted supports of moderate intensity or duration delivered to groups of students, and cases managed with one-on-one or one-on-few support. Schools should make early warning indicator data available to teacher teams and other adults who provide student supports (counselors, community-based organizations, and national service corps members). Schools should also analyze the data to ensure that student supports of sufficient intensity and scale are available. On a regular basis, teacher teams and other student support providers should meet and review the early warning indicator data, assign students to appropriate interventions, monitor student progress and intervention effectiveness, and make adjustments as needed. An example of this follows in the *Practice 1 Example Application*.

It is important to view effective classroom instruction and academic intervention in each core content as the cornerstone of school wide prevention, while recognizing that a subset of students will need support beyond a good lesson every day. Early warning and multi-tiered intervention systems also need to be integrated into school wide data efforts led by the school leadership team and should not be seen as stand-alone activities done by a separate team of student support providers. A few recommendations for steps to understand and change student behavior are shown in Table 3.

PRACTICE 1 EXAMPLE APPLICATION: Teacher Communication

In the middle grades, multiple teachers often share students. Therefore, it is important for teachers to have time and opportunity to talk with each other about shared students who need to change their behavior. During these meetings of teacher teams, the following activities can be used to gather information and generate strategies for handling student behavior challenges⁶:

- Share observations about a specific student's behavior (time of day, frequency, setting, etc.).
- Share ideas about action steps a teacher can implement in the classroom to address the behavior and reduce the impact on the rest of the class.
- Share lesson plans or lesson plan ideas for engaging students in a way that might reduce the behavior.
- If the student is shared by multiple teachers, other teachers can exchange information about the extent to which the behavior occurs in their class, the triggers, and any strategies that work to reduce or eliminate the behavior in their class.
- Share strategies for engaging parents in a discussion about the behavior of their child.
- Involve the school principal if a change in school policy would help address the behavior for this and other students.

Action Steps	Considerations
Describe the behavior and its effect on student learning.	<ul style="list-style-type: none"> • Be concrete in the description of the behavior. • Include details about the setting in which the behavior occurred. • Specify the time and frequency of the behavior. • Explain the extent to which the behavior impacts the student's learning and/or the learning of others.
Consider factors that may contribute to the student's behavior.	<ul style="list-style-type: none"> • Is the behavior influenced by cultural or linguistic differences? • Does the student have the academic skills to complete the task that was required when the behavior occurred? • Does the student have the necessary behavioral skills for the situation in which the behavior occurred? • Has there been any new stress or trauma in the student's life or family?
Gather data on the frequency and setting of the behavior.	<ul style="list-style-type: none"> • What patterns exist between the occurrence of the behavior and other environmental settings? <ul style="list-style-type: none"> ○ Location of behavior ○ Time(s) of day, class periods ○ Subjects or classes where behavior occurs or does not occur ○ Assignment student is working on ○ Level of difficulty of the assignment • Specific peers or adults present when the behavior occurs • Ask parents if the behavior occurs at home and the context of its occurrence. • Ask other teachers if the behavior occurs when the student is in their classroom and the context of its occurrence.
Identify what or who might be instigating or reinforcing the behavior.	<ul style="list-style-type: none"> • What need might this behavior be fulfilling? • Is there a certain environment that seems to trigger the behavior? • Are there certain students or adults who are with the student each time the behavior occurs? • Are there any specific curriculum or instruction variables that seem to trigger the behavior? • Are there certain seating arrangements where the behavior is more common (rows, small groups, pairs)?
Identify what happens after the behavior in terms of teacher and student reactions.	<ul style="list-style-type: none"> • How does the student react after the behavior? • Is the student being positively reinforced by the teacher or the students after the behavior? • Are there any consequences that might be reinforcing the behavior?

Source: Adapted from Epstein, et al. (2008)⁴

Table 3. Action steps for identifying problem behaviors and their causes

Practice 2: *Connect teachers to one another or to mentors to help with ongoing problem solving, student behavior, and any other classroom management needs.*

If data reviews identify a classroom or group of classrooms with higher than average attendance, behavior, or course performance problems, assign a peer teacher, mentor, or instructional coach to observe the classroom. Then, depending on what is learned, either develop targeted professional development supports that address the issue or provide the classroom with additional student and family support. When a particular classroom or set of classrooms exhibits higher than average problematic behaviors, it is typically for one of two reasons: (1) either the teacher has not yet developed the set of classroom management and instructional delivery skills needed to succeed with the students, or (2) the level of student and family need in the particular classroom is very high. What is required in these situations is a neutral investigation of the classroom dynamics from someone who can either provide or design the additional teacher supports needed or who can work with the school leadership and teacher teams to enhance the level of student and family support being provided. In some cases, the solution may involve changing classroom dynamics by altering the composition of students in the classroom.⁶

Principle 4:

Make the value of schooling personal.

We often tell students that schooling is essential for their success in life. This is often communicated in broad terms: “If you don’t go to college, you won’t get a good job.” For middle grades students who are 11 and 12 years old, this is a distant reality. A growing number of studies have shown, however, that small activities that cause students to reflect on and make connections between what they are learning and their current and future lives can have strong, positive impacts. Emerging research also suggests that when these connections include a potential link to the wider world beyond oneself, effort on even tedious but important learning tasks is increased.⁷

Practice 1: *Engage students in activities that allow them to reflect on the influence school will have on their future life and goals.*

Having students write short reflective paragraphs every few weeks on the usefulness of specific course material (what they are currently learning in math, English, science or social studies) to their lives has been linked to higher levels of interest in the material and course grades.⁸ A variation on this is to have middle grades students create time capsules that show what their lives will be like at age 25 and the impact that schooling and important decisions and actions had on their life. In both cases, the key seems to be not simply telling students that school matters for their future lives, but providing them the opportunity to actively reflect on it in very personal ways.

Principle 5:

Create a sense of belonging for all students.

The middle grades are a very tough time for students' sense of self and perception of feeling welcomed by others. Research indicates a key intervention is to show students that a sense of not belonging at the start of a new phase of schooling, (e.g., entering the middle grades), is normal and fades over time. This helps shift student perspective from an internal one, such as "I don't fit in," to an external one—that all sixth graders feel like this in one way or another.

Practice 1: *Include information on social integration in middle school transition programs.*

The evidence suggests that middle grades transition programs are likely important and that they should include more than just purely logistical information (e.g., *here is how your schedule works* or *this is how lockers open*). Including material on social integration into middle school and how all students often feel out of place at the start but find that these feelings fade over time, may help students make a smoother transition.

The emerging evidence also indicates the merit of sharing older middle school students' essays, in which they discuss how they initially felt out of place but found a sense of belonging, and then asking incoming students to write essays on how they relate to these feelings.⁹

These preventive efforts may also have to be paired with more targeted efforts like anti-bullying campaigns.

Practice 2: *Carefully frame academic tasks to reduce the risk of stereotype threats.*

A related challenge for some students is a stereotype threat. There are widely disseminated beliefs in our society that individuals from different racial and ethnic groups, as well as genders, "naturally" perform better or worse on different academic tasks. A growing body of research has shown that these stereotypes can have very subtle but profound impacts on a student's sense of belonging and motivation in school. High-quality research has shown that the impact is greatest on the most challenging problems or toughest academic tasks. In these circumstances, just small amounts of distraction caused by the student reflecting on the stereotype diverts enough mental focus to undermine success on tasks that require all available mental effort to complete. The research has also shown that a stereotype threat can be manufactured for anyone. We are all susceptible to the shadow of doubt in our ability to succeed on tasks.¹⁰

Be careful in how tasks are described to students and parents, and when possible, reduce the potential for a stereotype threat (e.g., by pointing out, "Research has shown that boys and girls perform equally well on these types of math problems.")¹¹

Principle 6:

Connect students' academic success to effort.

It is often in early adolescence that students become increasingly exposed to views that abilities are fixed (e.g., a student is “good at math” or “bad at writing”). This leads students to focus on their perceived strengths and withdraw effort from areas of perceived challenge. This viewpoint breaks the critical connection between effort and academic success. If students come to believe they are good at a subject because they are “smart” or not good at a subject because they are “bad at it” (e.g., “I am not a math person.”), then their overall level of effort may well decline.¹²

Practice 1: *Set high expectations for students and clearly communicate those expectations and the belief in their potential to succeed when providing feedback to students.*

A growing body of interdisciplinary research has shown that direct instruction in advisories or as part of core instruction, as well as teachers' communication with students, makes it possible to push back against views on ability-driven outcomes. Students can be taught that making errors is normal and leads to useful learning opportunities. This strengthens students' belief that with effort and productive persistence, they can succeed on challenging tasks, learn new things, and improve their academic skills. This in turn leads to greater effort by students and, through it, higher grades. For example, research has shown that middle grades students are much more likely to revise essays if they receive feedback that says, “I am giving you these comments because I have high standards and I know you can meet them” rather than a more neutral statement like, “Here is some feedback on your paper.”¹³

Practice 2: *Eliminate the use of indiscriminate incentive programs and unearned praise.*

Research has shown that two common approaches to improving student motivation, incentives and generic praise, either don't work or work only in narrow circumstances and can often have unintended negative consequences. While it is true that people broadly respond to incentives, it is also clear that building effective incentive systems to increase student effort is very difficult and often counter-productive. Compelling evidence has shown that incentives work only when the action being incentivized is fully under the control of the student and is directly related to important school outcomes. Thus, incentives have been shown to be more effective in increasing the number of books elementary students read than in having middle grades students improve their grades or attend school more regularly. Students can directly control whether they read another book, but they often do not fully know or understand how to raise their grades.¹⁴

There is also clear evidence that if not well conceived and executed, incentive systems can lead to decreased effort among some groups and across many students over time. For example, if students conclude they will never perform well enough to receive an incentive, they may in fact decrease their engagement and effort. Incentives may also inhibit students from seeing the value of the activity itself, and eventually, the lure of the incentive may decrease, leaving them less motivated over time.

Evidence also shows that indiscriminate praise or recognition of participation does not lead to increased motivation. Unearned praise sends the signal that effort does not matter. As the Gallup polls^{2, 3} show, the key feedback students are looking for, and what currently declines precipitously in the middle grades, is not praise for being who they are, but rather recognition for doing good schoolwork.

Conclusion

There is growing experimental literature showing the benefits of school wide positive behavior strategies and lesser literature on school wide attendance campaigns. The evidence base for teaching positive social and academic behaviors across classrooms is well explored in an Institute of Education Sciences (IES) practice guide,¹⁵ which provides recommendations for reducing high school dropout rates and presents intervention strategies that have been proven to work.

In recent years, a fair amount of high-quality research has shown that when educators help middle grades students develop a strong sense that schooling is for them and support them in their academic efforts, students can succeed academically. The other good news is that, by and large, this research has shown that relatively small changes in what schools do and how teachers interact with students can have substantial impacts on increasing student motivation.¹⁶

In addition to the IES guide on dropout prevention,¹⁵ an increasing number of quasi-experimental and randomized control trials have shown positive impacts of providing instruction in academic organization, self-regulation, and goal setting. Since these studies focused on a single component or program, the impact of more comprehensive and integrated efforts has yet to be determined; however, early identification of problem behaviors and how to meet them is supported by a wealth of research in the public health domain. Some of the practices and most of the practice examples shown in this section are best-practice applications based on current understanding supported by or derived from the foundational research described above. While these practices and examples have not been rigorously evaluated to date, the data support their use.

References:

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1. Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology*, 85(2), 357-364.
2. Gallup Inc. (2013). *U.S. overall Gallup student poll results*. Retrieved from <http://www.gallupstudentpoll.com/174020/2013-gallup-student-poll-overall-report.aspx>
3. Gallup Inc. (2014). *U.S. overall Gallup student poll results*. Retrieved from <http://www.gallup.com/services/180029/gallup-student-poll-2014-overall-report.aspx>
4. Epstein, M., Atkins, M., Cullinan, D., Kutash, K., & Weaver, R. (2008). *Reducing behavior problems in the elementary school classroom: A practice guide* (NCEE 2008-012). 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/PracticeGuide.aspx?sid=4>
5. Balfanz, R., Fox, J. H., Bridgeland, J. M., & McNaught, M. (2009). *Grad nation: A guidebook to help communities tackle the dropout crisis*. Washington, DC: America's Promise Alliance.
6. Goodwin, B. (2010). *Changing the odds for student success: What matters most*. Denver, CO: Mid-continent Research for Education and Learning (McREL). Retrieved from <https://www.mcrel.org/wp-content/uploads/2015/10/CTOPub.pdf>
7. Yeager, D. S., Henderson, M. D., Paunesku, D., Walton, G. M., D'Mello, S., Spitzer, B. J., & Duckworth, A. L. (2014). Boring but important: A self-transcendent purpose for learning fosters academic self-regulation. *Journal of Personality and Social Psychology*, 107(4), 559-580.
8. Hulleman, C. S., & Harackiewicz, J. M. (2009). Promoting interest and performance in high school science class. *Science*, 326(5958), 1410-1412.
9. Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes for minority students. *Science*, 331(6023), 1447-1451.
10. Steele, C. (2010). *Whistling Vivaldi: How stereotypes affect us and what we can do about it*. New York, NY: W. W. Norton.
11. Ganley, C. M., Mingle, L. A., Ryan, A. M., Ryan, K., Vasilyeva, M., & Perry, M. (2013). An examination of stereotype threat effects on girls' mathematics performance. *Developmental Psychology*, 49(10), 1886-1897.

12. Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.
13. Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., . . . Cohen, G. L. (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide. *The Journal of Experimental Psychology*, 143(2), 804-824. Retrieved from <https://www.apa.org/pubs/journals/releases/xge-a0033906.pdf>
14. Fryer, R. G. (2011). Financial incentives and student achievement: Evidence from randomized trials. *Quarterly Journal of Economics*, 126(4), 1755-1798.
15. 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
16. Headden, S., & McKay S. (2015). *Motivation matters: How new research can help teachers boost student engagement*. Stanford, CA: Carnegie Foundation for the Advancement of Teaching. Retrieved from <http://www.carnegiefoundation.org/resources/publications/motivation-matters-how-new-research-can-help-teachers-boost-student-engagement/>