

CAN MIDDLE SCHOOL REFORM INCREASE HIGH SCHOOL GRADUATION RATES?

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Highlights:

- ▶ **Declines in motivation and school engagement are prevalent among students moving from 6th to 7th grade, except for those students in K-8 schools.**
- ▶ **During early adolescence, declines in motivation may occur because typical intermediate schools—middle and junior high schools—are not providing appropriate educational and social environments.**
- ▶ **Failing a single course in the middle grades substantially increases the likelihood of dropping out of high school.**
- ▶ **There is no stronger predictor of students' confidence in their academic ability than the grades they receive.**
- ▶ **Many intermediate school teachers feel less effective as teachers, especially for low ability students, than elementary teachers and teachers in K-8 schools.**
- ▶ **When student engagement is accompanied by high quality instruction, academic failure should be preventable.**

For a substantial number of youths, early adolescence (ages 11-14) marks the beginning of a difficult period that can end in failing classes, dropping out of school, delinquency and substance abuse. This is particularly true for students of color, students from lower socioeconomic status (SES) families, and students who have had academic difficulties in elementary school. The magnitude of these declines in academic motivation, school engagement, and academic performance at the shift into middle and junior high schools is a significant predictor of dropping out.

This report reviews research on 1) the declines in students' academic motivation, school engagement, and academic performance as they move into middle and junior high schools; 2) how the current design of these schools contributes to these declines; and, 3) how these schools can be redesigned to re-engage students and reduce dropouts.

▶ Declines in Motivation and Engagement

Academic motivation is the key to school success. Motivation is influenced by the answers to two fundamental questions: “*Can I do the task?*” and “*Do I want to do the task?*” The answers to these two questions influence students' school engagement—their active involvement in school and school based learning tasks—as well as their willingness to remain in school until graduation. Put differently, **students will be most likely to continue in school and engage fully in learning if they have confidence in their ability to do well and place high value on doing well in school.**

For many students, however, early adolescence is a time when academic motivation and school engagement begin to decline. For example, there are documented declines in: interest and feelings of belonging in school, valuing particular subjects such as math, confidence in intellectual abilities (especially following failure), and in the belief that one has control over one's own academic learning and performance.

There are also increases in school-related apathy, test anxiety and general academic worries, as well as a belief that variations in academic performance reflect innate differences in academic ability, rather than differences in experience and learning opportunities.

An increased belief in innate differences in academic ability is often coupled with the belief that failure is likely to persist, that one

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has little internal control over one's learning, and that one has low academic ability.

Negative consequences of these beliefs, particularly for already low-performing students, include a loss of confidence in the ability to master challenging academic material, and a decrease in the value attached to schoolwork and engagement in school.

There are also marked declines in some early adolescents' grades as they move into junior high school. These declines in achievement predict lowered confidence in expectations for success, less value attached to school, and subsequently, school disengagement, academic failure, and dropping out. In fact, *failing a single course in the middle grades substantially increases the likelihood of dropping out of high school.*

These changes during early adolescence are also problematic because scholastic anxiety and stress, feelings of loneliness and alienation, and feelings of low academic competence are known to be risk factors for the psychological well being of adolescents as they make the transition to a new school environment and need to contend with new social and academic demands.

While these changes do not necessarily indicate a negative developmental trajectory for *all* adolescents, such changes do suggest that substantial numbers of young people are at risk for poor psychological functioning, school failure, and dropping out. These changes

are especially problematic among those who were most at risk before they entered their adolescent years.

► How Do Middle School Experiences Contribute to These Declines?

There is strong evidence to suggest that school-related experiences, rather than puberty alone, account for these declines in school engagement and motivation.

A groundbreaking study found that declines in motivation and school engagement were prevalent among students who made the junior high school transition from 6th to 7th grade, **while declines were either much smaller or non-existent among students enrolled in K-8 schools** over these grades.

Another study found that 8th-graders in K-8 schools were more engaged and motivated for school than the 8th-graders in either *middle schools* (grades 6-8) or *junior high schools* (grades 7-9)—the schools currently enrolling the majority of young adolescents in the U.S.

Furthermore, the 8th grade teachers in the K-8 schools were also more engaged in their teaching and more enthusiastic about their students than the teachers in either middle schools or junior high schools.

Findings such as these suggest that motivational declines evident during early adolescence could result from the fact that typical intermediate schools—middle and junior high schools—are not providing appropriate educational and social environments for early

adolescents. Behavior, motivation, and mental health are influenced by the fit between the characteristics individuals bring to their social environments and the characteristics of these social environments.

If the academic and social environments in the typical intermediate school do not fit with the psychological needs of adolescents, then a decline in motivation, interest, performance, and behavior would be expected as adolescents move into and through this environment.

A growing body of research on classroom environments across grade levels and school types supports this hypothesis, revealing that, compared to K-8 and elementary schools:

1. Teachers in intermediate schools are more focused on control and discipline, and provide fewer opportunities for student decision-making, choice, and self-management.
2. Intermediate grade classrooms have less personal and positive teacher/student relationships and less trust between students and teachers. As a result, at a time when most early adolescents are confronted with uncertainty about themselves, they are often met with distrust by the very people who could provide support for them.
3. Intermediate school teachers use stricter standards and more social comparisons to assess student competency and evaluate student performance, leading to a drop in grades

for many early adolescents as they make the junior high school transition. *There is no stronger predictor of students' confidence in their academic ability than the grades they receive.* If grades change, then we would expect to see a related shift in adolescents' self-perceptions and academic motivation. In fact, **this grade decline is a major predictor of high school drop out.**

4. Many intermediate school teachers feel less effective as teachers, especially for low ability students. Here again, at a time when early adolescents are working to establish a sense of personal competence and efficacy, and are in need of adult role models, significant adults in their lives do not, themselves, feel effective in their roles.

These four patterns are likely to have a negative effect on students' motivation toward school at *any* grade level. But increasingly, scholars now believe that these types of school environment changes are *particularly harmful at early adolescence* because they:

- emphasize competition, social comparison, and ability self-assessment at a time of heightened self-focus;
- decrease decision-making and choice, at a time when the desire for autonomy is growing; and,
- disrupt social networks at a time when adolescents are especially concerned with peer relationships and may be in special need of close adult relationships outside of the home.

Research suggests that these characteristics result, in part, from the size and bureaucratic nature of intermediate schools as an institution. School characteristics such as large size, minimal connections to the community, and a departmentalized, organizational structure based on specialized teaching roles, ability grouping, normative grading (where some students are always assigned low grades), and large student load, can undermine the motivation of both teachers and students.

It is difficult for teachers to maintain warm, positive relationships with students if they have to teach 25-30 different students each hour of the day. Similarly, it is hard for teachers to feel effective in their ability to monitor and help all of these students.

Finally, it seems likely that teachers will resort to more controlling strategies when they have to supervise such a large number of students.

► What Can Be Done?

The most consistent recommendations about school reform for this period of life focus on three major issues: school size, teacher/student relationships, and opportunities for all students to succeed academically. The importance of small schools or schools-within-schools (small learning communities), has been stressed in many reform proposals, along with the need to provide rigorous, challenging, and high quality instruction for all students (*see CDRP Policy Report: Solving California's Dropout Crisis*).

Small learning communities are likely to be particularly important

during this developmental period because they support the emergence of strong teacher-student relationships that allow students some autonomy within a very tight support network. These characteristics should support stronger engagement and identification with the school institution. When engagement is accompanied by high quality instruction, academic failure should be preventable.

This combination of school/teacher characteristics and student engagement is particularly important for youth at risk of dropping out of high school, because they are the ones most likely to be disengaging from school at this point in their development. These at-risk students are also the ones most in need of a strong positive relationship with their teachers in order for their needs to be recognized and dealt with in a positive and effective manner.

An increasing number of scholars and student advocates have argued for a return to the K-8 format, because it seems to create more **developmentally suitable environments** for the early adolescent years. This format usually includes smaller learning communities and strong supportive ties between students and their teachers and other adult school personnel.

The K-8 format also provides the opportunity for young adolescents to experience leadership roles in the school and, if provided, opportunities to help younger students through such activities as peer tutoring, mentoring, and supervision.

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