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JOHN W. GARDNER CENTER for Youth and Their Communities

Caring and Motivating Middle School Classrooms

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Background

Since 2009, the John W. Gardner Center for Youth and Their Communities (JGC) at Stanford University has worked in partnership with the Redwood City School District (RCSD) to gain a deeper understanding of classroom practices that promote motivation and achievement in middle school. Each spring, all middle school students in the district complete a survey about their motivational beliefs and their classroom experiences.

The 2011 survey incorporated a new set of questions designed to capture students' perceptions of classroom practices that convey care and support. This focus emerged from conversations with teachers and administrators and reflects RCSD's commitment to building supportive classroom communities that emphasize effort and improvement.

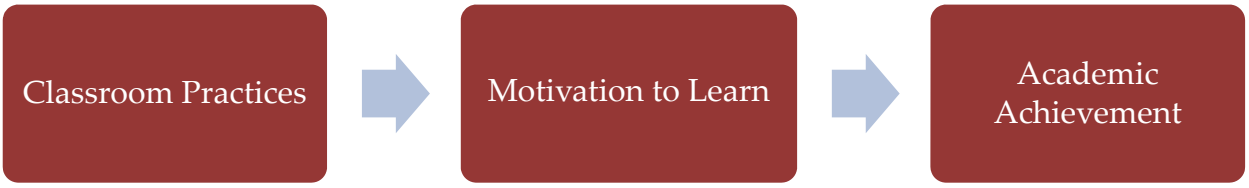
Our current analyses explore various kinds of caring classroom practices and the extent to which these practices motivate students to learn. This brief highlights three main findings:

1. Students' motivational beliefs are predictors of their math achievement.
2. Caring classroom practices are associated with increases in students' motivational beliefs.
3. Perceptions of caring classroom practices differ according to students' grade and math proficiency level.

Guiding Framework

Our work is guided by the premise that classroom practices promote students' motivation to learn which, in turn, promotes academic achievement (Patrick, Ryan & Kaplan, 2007; see Figure 1). Several studies (e.g., Fast et al., 2010; Patrick, et al., 2007) as well as findings from JGC research in Redwood City lend support to this framework.

Figure 1. Guiding Framework



In particular, among middle school students in RCSD, positive motivational beliefs are associated with higher achievement in math. For example, take the case of a 7th-grade student who scored 339 on the 7th-grade math California Standards Test (CST) in 2011. This score placed her in the district's 44th percentile with a proficiency level "Basic." If that student's motivation (measured on a scale from 1 to 6) were one point higher, she would have scored instead in the 52th percentile, moving her up to the "Proficient" category.

With compelling evidence that motivation influences achievement, we set out to investigate classroom practices that promote middle school students' motivation to learn. More specifically, in this brief, we focus on classroom practices designed to convey messages of care and support for students.

Researchers and practitioners offer varied definitions of caring classrooms. Some define care as individualized attention to students' academic or emotional needs (Wentzel, 2009). Others attend to teachers' rules about treating classmates and teachers with respect and promoting a caring environment (Noddings, 2005). Our research explores these different definitions of caring classroom practices and the extent to which they are associated with students' motivation.

Survey Participants

RCSD serves approximately 2,500 students in grades 6 through 8. In this set of analyses we focused on approximately 1,700 students who completed our survey in 2011 and who had complete survey data and administrative data. Among the students who completed the survey, 50% were female, 73% were Latino, and 60% received free or reduced priced lunch. Students represented all eight schools that serve middle school students, and each grade level was equally represented.

Measuring Motivation, Practices and Achievement

In this study we define motivation as students' beliefs about their ability to master their school work. To measure motivation, we asked students to respond to five statements such as "I can do even the hardest work in math[1] class if I try," and rate how true that statement was for them on a scale from 1 to 6 where 1 is *very untrue* and 6 *is very true*[2].

[1] Our survey asks students to focus on a specific class because motivational beliefs are both subject-specific and context-specific. Even though our survey focused on math classrooms, the knowledge base in the field of motivation strongly suggests that our guiding framework applies to all school subjects.

[2] The motivation items in our survey draw on the work of Carol Midgley and her colleagues (2000) who designed and validated the scales that we use.

Measured on the same 1-to-6 scale, our survey also included questions about caring practices students experienced in their classrooms. In particular, these questions tapped into four kinds of caring practices[3]:

- Providing students with instructional strategies to support their learning
- Displaying and communicating concern for students' emotional well-being
- Creating a learning environment of mutual respect
- Communicating expectations that students can succeed in their classroom

To measure students' perceptions of practices that convey care in the form of **instructional strategies or scaffolding**, we asked students to respond to four statements including "My math teacher helps me when I have trouble with the work," and "If I can't solve a problem, my math teacher asks me questions that help me understand what to do."

Emotional care was measured with four questions including, "My math teacher considers my feelings," and "My math teacher talks with me about things going on in my life."

We captured students' perceptions of practices that create a **classroom environment of mutual respect** by asking them to respond to four statements including, "In math class students are not allowed to make fun of someone who gives the wrong answer" and "In math class we are told to respect each other's opinions."

Finally, students' perceptions of teachers' **expectations** were measured with the question, "My math teacher believes that I can do well in his/her class."

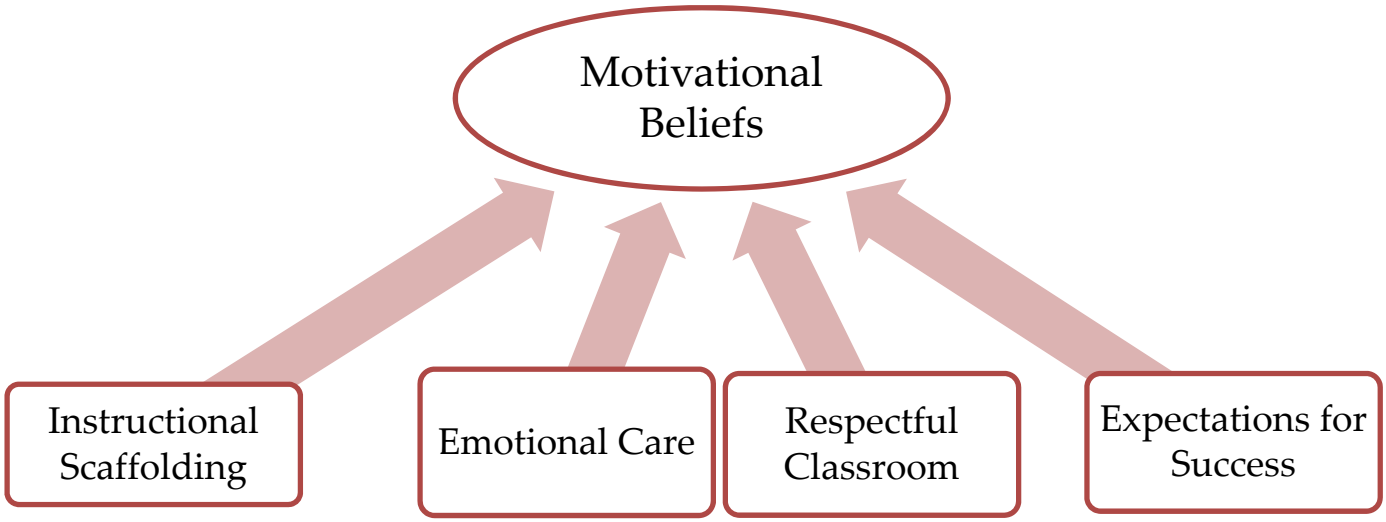
Achievement was measured using the California Standards Test (CST) for math. Students' survey responses were linked to their district records using the Youth Data Archive.[4] Our analyses included students' performance on these achievement tests from 2010 and from 2011. In addition, our analytic models were careful to consider which CST math test each student took relative to their peers in their grade cohort.

All Caring Classroom Practices were Related to Students' Motivation

All four sets of caring classroom practices were significant predictors of students' motivational beliefs (see Figure 2). Our analyses held true for all types of students across the district. **Higher reports of caring classroom practices were associated with increases in students' motivation** regardless of students' proficiency level, gender, grade level, ethnicity or economic status.

[3] Survey items measuring caring practices draw on the work of Fraser, 1998 and Patrick and her colleagues (2007).
[4] The Youth Data Archive (YDA) links data across schools, public agencies, and community based organizations to answer key questions about youth. Participating agencies collectively identify shared questions that no single agency can answer alone.

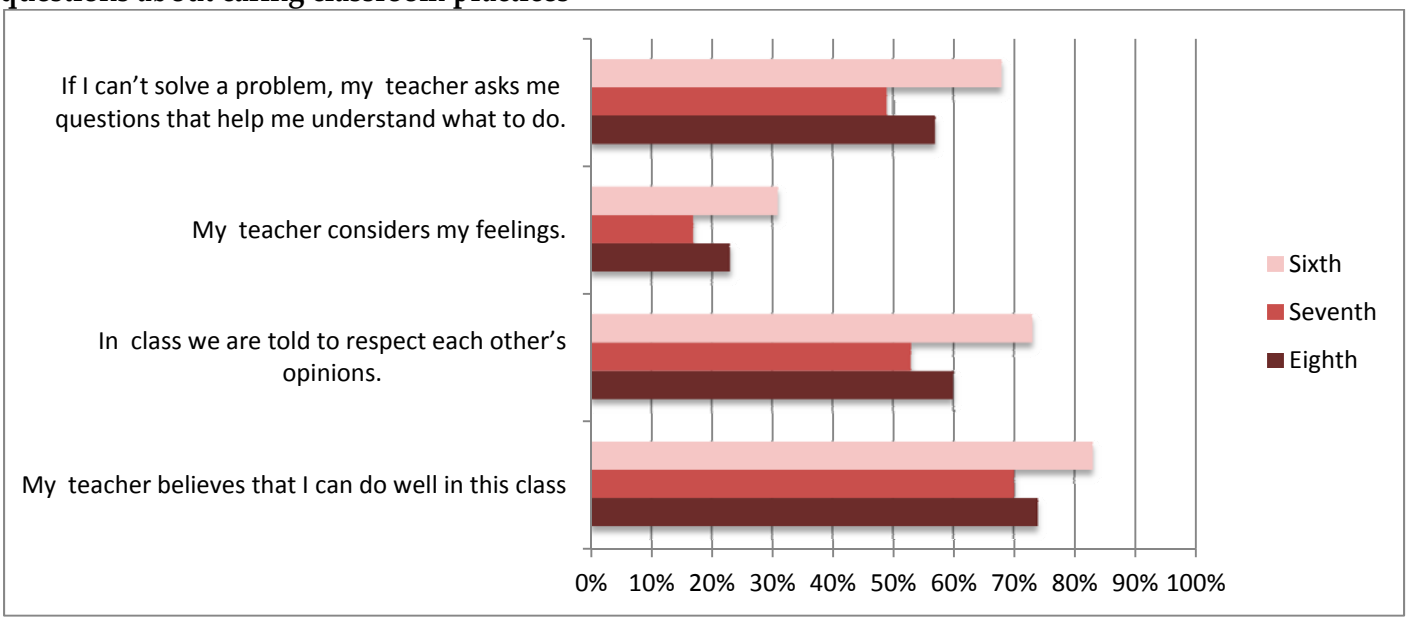
Figure 2. Caring classroom practices cultivate students' motivational beliefs.



Grade Level Differences in Perceptions of Care

For all students in our analyses, the relationship between students' motivational beliefs and their perceptions of caring classroom practices held true. Nevertheless, some students in the district reported higher scores on measures of these practices compared to their peers. **Specifically, 6th grade students reported higher scores on all four sets of caring classroom practices compared to 7th and 8th grade students (See Figure 3).** Interestingly, 8th grade students reported higher scores on each set of practices compared to 7th grade students in the district. This pattern was apparent across all eight schools in the study.

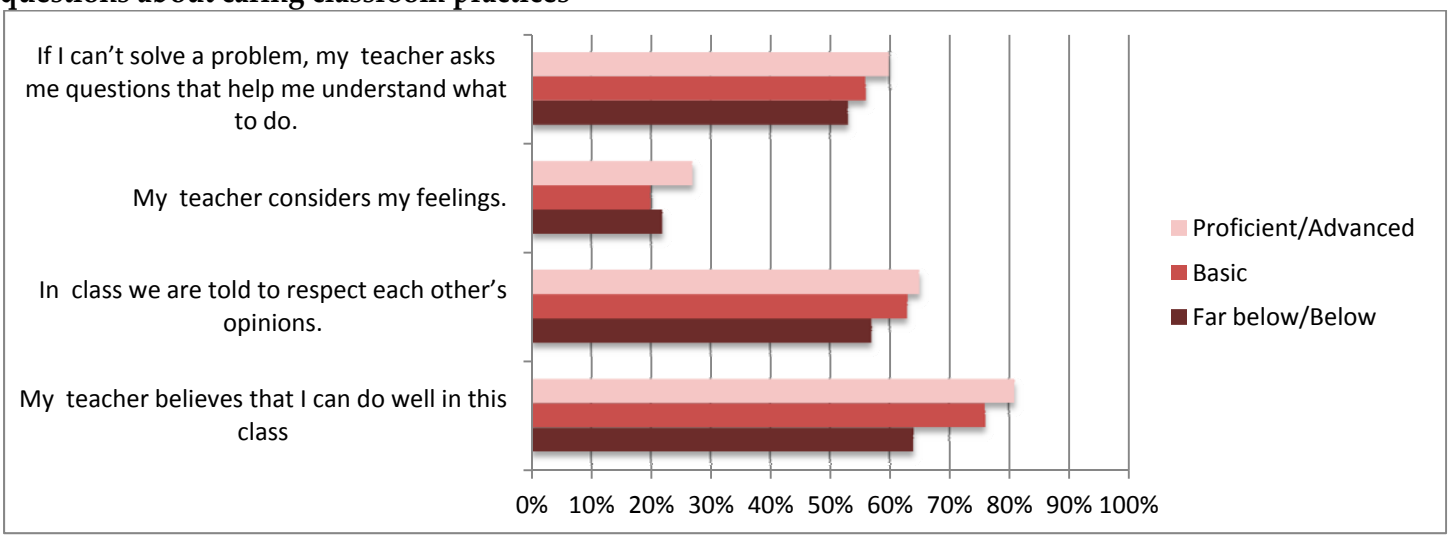
Figure 3. Percentage of students by grade level who answered "true" or "very true" to selected survey questions about caring classroom practices



Proficiency Level Differences in Perceptions of Care

Similarly, our analyses indicated that students with different proficiency levels in math reported different experiences of care in their classrooms. **In general, higher levels of proficiency were associated with higher reports of caring classroom practices.** The most significant differences were evident when "Proficient and Advanced" students' experiences were compared to students' categorized as "Below or Far Below Basic" (see Figure 4).

Figure 4. Percentage of students by proficiency level who answered "true" or "very true" to selected survey questions about caring classroom practices



Summary

This research suggests that all middle school students in the district can benefit from practices that communicate care for students as individuals and as a group of learners regardless of their gender, ethnicity, income level or academic history. These practices have the potential to launch students on a positive academic pathway by cultivating a belief system that encourages students to engage and persist with their learning. Moreover, students appear to be responsive to a range of strategies for communicating care and support for their learning. To summarize, our analyses highlight the following key findings:

1. **Motivational beliefs consistently predict achievement**. This study confirms and validates our previous research in Redwood City and emphasizes the critical role that students' motivation plays in their learning and achievement.

2. **Care can be conveyed to students through multiple approaches.** Students benefit from teachers who support and scaffold their learning, attend to their emotional needs, create a respectful classroom and communicate high expectations. Each of these practices was associated with increases in students' motivational beliefs.

3. **Seventh grade marks a dip in students' perceptions of care**. Both 6th grade students and 8th grade students perceived more caring practices in their classrooms compared to 7th grade students throughout the school district. This finding provides an important opportunity for inquiry into possible developmental or contextual explanations for this dip.

4. **Perceptions of care vary according to students' proficiency levels in math.** Students who were advanced or proficient in math perceived more caring practices in their classrooms compared to students who were categorized as below basic or far below basic.

Implications

Practices that increase students' motivation to learn are extremely powerful, and our findings have important implications for policy and practice:

1. **All types of students benefit from caring practices in the classroom**. Strategies that work for high achieving students can help students who are not as successful in school. Our research suggests that the benefit of caring practices on students' motivation and achievement is not dependent upon their academic histories, gender, ethnicity or family income-level.

2. **Students' achievement histories and demographics do not determine their future academic trajectories.** School policies and practices that base decisions on students' past academic performance need to be reexamined. Students' motivational beliefs are malleable and responsive to classroom practices. As motivation increases, achievement outcomes increase as well. Therefore, policies and practices focusing on increasing students' motivational beliefs can contribute to keeping students on a positive educational path.

3. **Research that captures current practices provides a unique and valuable lens.** The findings presented in this brief reflect practices currently implemented across classrooms in the Redwood City School District. Our research team did not create an intervention or conduct an evaluation of a specific program in the schools. By capturing successful and effective practices, our research approach positions the teachers, principals and administrators as experts in translating our findings into actionable strategies for improvement. Effective practices are happening in this district, and teachers and administrators can serve as resources for one another as well as for the broader fields of research, policy and educational practice.

Through our partnership with the Redwood City School District, we continue to gather concrete examples of school-wide and classroom-specific practices that succeed in motivating middle school students. During the next phase of our research, we will spend more time learning how this care is enacted in the classroom by conducting classroom observations and engaging in conversations with teachers throughout the district.

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For more information about the study on "Caring and Motivating Middle School Classrooms," please contact Karen Strobel at strobe@stanford.edu.

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