



Linking Mindset Theory to Effective Practices in Middle School Classrooms

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Abstract

Through collaborations among faculty within Stanford University, staff at the John W. Gardner Center (JGC), and several middle schools in an economically and ethnically diverse local school district, we utilize school-based learning communities to develop, implement, and study classroom instructional practices and social processes that effectively promote a growth mindset as well as other, related motivational attitudes and beliefs that have been linked to successful academic outcomes for students.

Education Challenge

Middle school students' perceptions of their academic competence play a pivotal role in their educational and developmental trajectories. These beliefs are especially critical for low-income students and language minorities who are more likely to have underachieved during their elementary years. (Brooks-Gunn, Duncan, & Aber, 1997). With a history of low-achievement, students may learn that their efforts are not likely to lead to success; they may believe that there is nothing they can do to improve their academic or life outcomes.

To address this problem, our project is:

- ❑ Investigating the dynamic relationship between classroom practices, student motivation, and academic outcomes.
- ❑ Helping teachers understand students' beliefs about their competence and potential
- ❑ Helping teachers identify and utilize classroom practices that may encourage students to shift their **mindset** and increase their motivation to engage in learning efforts.

Project Goals

Cross Disciplinary

Bridging theories of **motivation** and **school reform**

- ❑ When students believe that their intelligence is malleable – “a growth mindset,” they are more likely to equate hard work with intellectual growth and competence and, as a result, achieve academic success (Dweck, 2006).
- ❑ Teacher learning communities are associated with gains in student achievement-related outcomes (for review, see McLaughlin & Talbert, 2006).
- ❑ When teachers come together to discuss student work and their own practices, they learn more about the effectiveness of their own practices, implement the practices, and feel more supported (Grossman, Wineburg, & Woolworth, 2001; for review, see Little, Gearhart, Curry, & Kafka, 2002).

Collaboration with local teachers

A close working relationship with teachers at one middle school:

- ❑ Assisting in creating and sustaining school-based professional learning communities to help teachers improve, develop and reflect on their own practices
- ❑ Focusing teachers' attention on students' motivational beliefs and the practices which promote the “growth mindset.”
- ❑ Integrating teachers' experiences with students and reflections on their practices into our larger research agenda.

Make Research Relevant

Sharing results with both researchers and practitioners:

- ❑ Exploring the relationship among middle school classroom practices and student motivation, engagement, learning, and achievement over time.
- ❑ Translating research findings into meaningful school-based and classroom-based practices.
- ❑ Producing a toolkit that will guide other schools through the process of creating learning communities and accomplishing similar goals.

Project Design

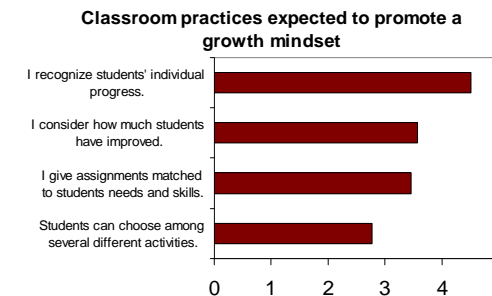
Our project is being carried out in two phases. The first phase is designed to engage teachers at one school in a collaborative learning process, study this process, and use it to inform phase two. The second phase is designed to collect data from all middle schools in one school district to understand the nature of the relationship among classroom practices, student motivation and mindset, and academic outcomes more broadly.

	Phase I	Phase II
Time	Summer '08 to Spring '09	Spring '09 to Spring '11
Sample	1 middle school 900 students 65% free/reduced lunch 40% ELL 72% Hispanic, 18% White, 3% Asian, 3% African American	8 middle schools 2,700 students 60% free/reduced lunch 50% ELL 69% Hispanic, 22% White, 3% Asian, 2% African American; 2% Pacific Islander
Data collection	Participant observations Survey teachers and staff	Classroom observations Student Survey Staff Survey School Administrative Records

Phase I: Highlights

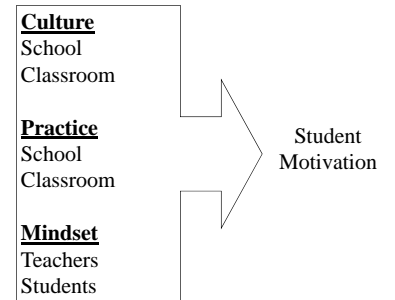
Phase I of our project has offered insight into the complex process of helping students revise their self-perceptions and adapt growth mindsets.

As seen in the graph below, based on data from 2009, teachers tend to gravitate toward acknowledging effort, but struggle to implement other related practices which promote a growth mindset.



Phase I: Highlights

Teachers' attempts to apply motivation theories in the classroom are both hindered and facilitated by the school context as a whole.



In order to increase student motivation, both students and teachers need to revise their mindsets. This is only possible within a school culture that accepts and promotes a growth mindset.

Implications

Practice: Learning communities have the potential to change the school culture, by changing teachers mindsets and creating conditions to encourage students to adapt a growth mindset.

Teachers need help identifying and implementing new instructional strategies.

Research: Studying the relationship between classroom practices and students' mindsets requires designs that take into account the nested settings in which students and teachers interact.