

It's About Time: A Model for Transformative Professional Development to Reduce Secondary School Attrition

by Ivan Cheng

Introduction

In 2000, successful completion of first year algebra became a high school graduation requirement in California. Recently, the *Los Angeles Times* quoted Los Angeles Unified School District superintendent Romer in saying that algebra “triggers dropouts more than an single subject” (Helfand, 2006, p. A14). Further, LAUSD statistics indicate that the percentage of students receiving Ds or Fs in one-year algebra courses ranges from 44.7% to 63.9%, depending on the grade level of the students (Ai and White, 2003). In some classrooms, the failure rate is even higher.

According to *Time* magazine, “nearly half of all dropouts ages 16 to 24 are unemployed” (Thornburgh, 2006, p. 38). The high failure rate in algebra is also having a tremendous impact on the graduation and college-going rates among minority students in particular. In order to help all students succeed, teachers need professional development time to rethink and revise their teaching strategies. However, the current structures of most schools do not provide teachers the time that they need to do this (Darling-Hammond, 1998).

Research indicates that the most effective forms of professional development are those that change teacher beliefs and practices by linking what they learn to their immediate classroom contexts (Loucks-Horsley, et al., 2003; Sparks, 2002). The literature also suggests that one setting that is likely to provide teachers adequate time to engage in reflection and inquiry *while they are actually teaching* is the traditional summer school or inter-session. During this time, teachers and students are not bound to the routines and constraints of the traditional semester. Typically, teachers have only one or two classes per day, and the atmosphere is more relaxed because teachers have fewer responsibilities. Stevenson and Stigler (1992) suggest that freeing teachers from the time demands of the traditional school day would give teachers the time to plan activities and reflect on their teaching.

In January, 2006, based on a grant from the Alliance for Regional Collaboration to Heighten Educational Success (ARCHES), a partnership between District 2 of LAUSD, California State University Northridge, Los Angeles Mission College, the Economic Alliance of the San Fernando Valley, and Project GRAD Los Angeles conducted a pilot study of using inter-session to empower teachers in promoting student improvement. This collaborative project, known as Student Improvement Through Teacher Empowerment (SITTE), was based on the theory that teachers learn and grow by becoming problem solvers, rather than by being recipients of one-size-fits-all solutions generated by outside agencies. Most important, current research suggests that such an approach can improve student achievement substantially (Cheng, 2005).

Findings

The SITTE pilot study focused on the development of teachers' instructional capacity to promote student success in algebra and collected baseline information on SITTE's impact on student achievement and teacher beliefs and practices. The student achievement data was based on pre- and post-test scores using LAUSD's quarterly assessments as well as course grades. Teacher beliefs and practices was examined through analyses of the teachers' comments and actions during the inter-session.

First, the student achievement data examined how well the inter-session students performed on the Quarter 2 periodic assessment compared to the scores of the students from the regular semester. The average score of the inter-session students was 27.8% while the average of the students from the same track was 27.3%. Based on this measure, there was no significant impact on student achievement on district quarterly assessments. Similarly, grade comparisons of students from the regular semester and the students in SITTE showed no significant differences (see figure 1). However, when inter-session grades were compared, there appeared to be significant gains for students who took algebra as part of the SITTE study over students who took algebra during the previous inter-session (see figure 2). This is particularly relevant because the previous inter-session was taught by a teacher who subsequently participated in SITTE.

Figure 1

Comparison of Pass Rates (by %)

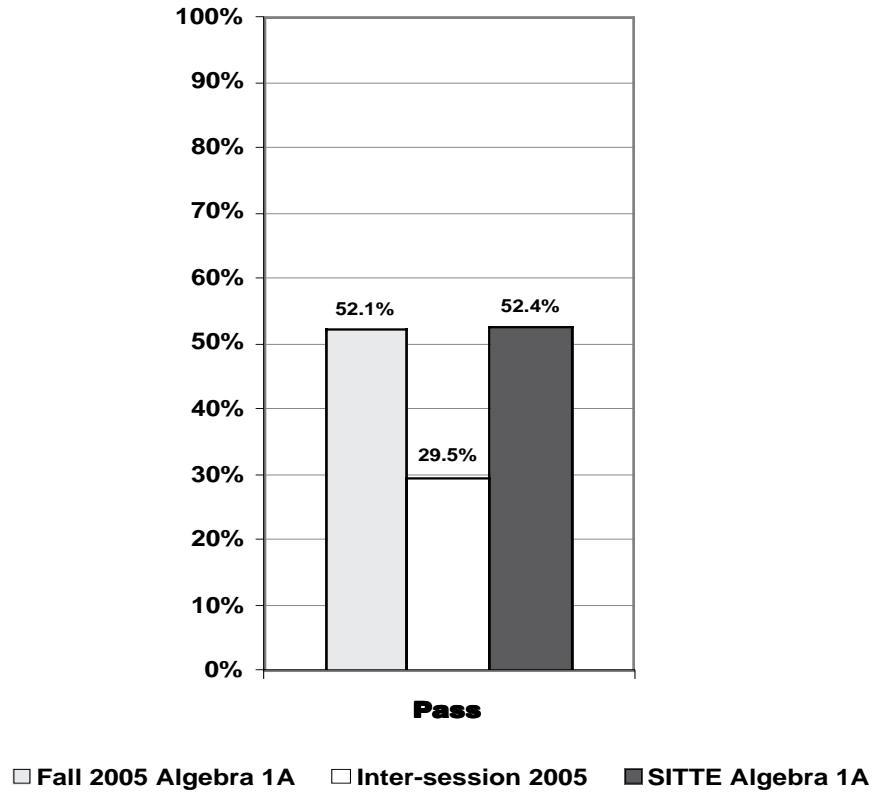
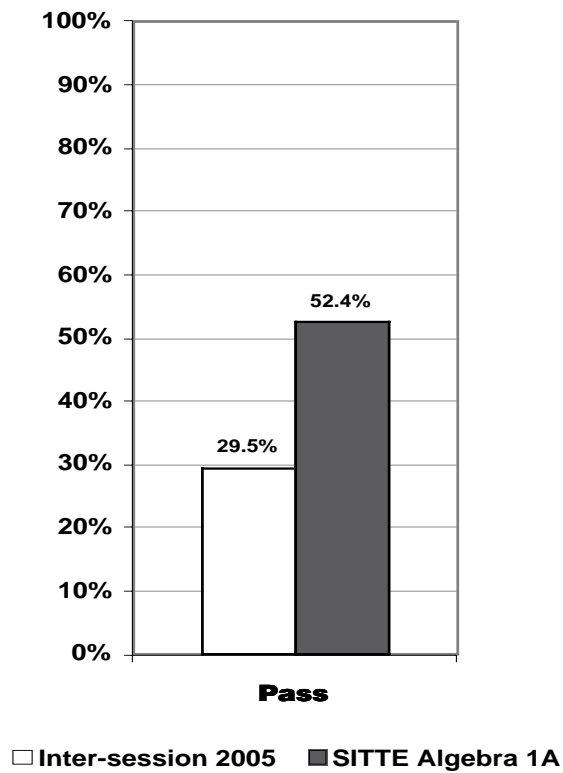


Figure 2

Comparison of Pass Rates (by %)



Among other things, the significant change in grades suggests that, if nothing else, teachers were thinking differently about how they perceived their students' capabilities and how they taught. Qualitative data suggest that teachers shifted from getting through a book to getting through to the students. Rather than focusing on areas that the students had not mastered, the teachers learned to build on what the students already could do. Thus, the students were more willing to try. According to one teacher, "I have seen their gratitude in their coming everyday, happy to receive worthwhile instruction. I have not seen them run out of steam or start dropping out after the first three weeks like before."

In the same way that students became empowered to learn, the teachers also found themselves empowered to construct their own learning. During SITTE, they had the time to review their students' work, reflect on their teaching, and refine their strategies. As a result, they experienced transformative learning that rarely occurred with typical professional development activities. One teacher remarked, "Click. Why do I insist on sticking to my comfortable ways of lesson planning and teaching even when I know that half of my roster is still failing? ... From this point on, I will be teaching our [new] method." And as the teachers continued to develop new strategies and lessons they also began to experience generative learning. Another teacher reflected, "I grew as a teacher. I learned to value others' ideas, and most important, I learned what collaboration is about."

Implications

The lessons learned from the SITTE project suggest that structuring this type of activity during summer school/inter-session may have a powerful impact on students *and* teachers. Without a doubt, such a professional development activity was only made possible by the support of school and district administrators, for *it was their trust* in the teachers' ability to use the time productively that made SITTE possible. Furthermore, the changes that occurred with the teachers was influenced by six particular features of the SITTE project. First, this project was based on an understanding of the local school culture and context of individual teachers. Thus, the design of SITTE, began with the teachers identifying *their* key concerns about *their* students.

A second key feature of SITTE was the use of the teachers' knowledge as the starting point for creating solutions to their own problems. This constructivist approach to professional development honored the expertise of the teachers and promoted such practice in the classroom. In this manner, teachers learned how to continue their own ongoing improvement, even after the professional development ended.

Third, SITTE teachers saw themselves as the problem solvers because they had a specific problem to solve. In other words, SITTE focused on a goal other than teacher improvement and the participants saw that *they* were not the ones being "developed." Instead, they saw themselves as the problem solvers. Such a specific project, however, must also have a specific time frame. The six week duration of SITTE was important because it provided a clear finish line for the work and it allowed the teachers to bring closure to their task.

A fourth key feature of the SITTE professional development was the constant emphasis on what was working, rather than on what did not work. This positive focus allowed the teachers to build on and improve what they had already done. It allowed them to *start* from where they were at. And it kept the professional development from degenerating into complaint sessions. By focusing on the positive, the teachers could then work on generating solutions rather than on making excuses.

Fifth, teachers were provided the tools that they needed in order to get the job done. These tools included books, articles, materials from conferences, etc. The key point here was that the resources were made available, but not mandated. The goal was not to get teachers to adopt a particular curriculum or methodology. Instead, the teachers were empowered to use the tools as they saw fit.

Sixth, and most important, the conditions for promoting professional collaboration had to be carefully organized and established. This meant that teachers had to be given the time and the space, along with the resources and coaching support to engage in the development of solutions. Together, these principles brought about dramatic changes in teachers' beliefs and practices. Best of all, it brought about a significant improvement in student achievement.

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