

**Implementing Standards-Based Middle School Reform**

**Long Beach Unified School District**

**August 2000 Update**

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## **Standards-based Middle School Reform**

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#### Introduction:

The Edna McConnell Clark Foundation has announced that the 1999-2001 grant will be the final implementation grant awarded by the Program for Student Achievement. Education Matters felt it was an opportune time to rethink the design of our evaluation to consider how we could be most helpful to the district in providing feedback that could inform their ongoing work beyond the life of the grant.

As a result, we thought it was important to concentrate our efforts on one of the most challenging aspects of standards reform, how to support students who are not meeting standards. Our goal is to provide useful information to the Foundation and to the district by identifying practices that appear to be effective in raising student achievement, and that address both the academic and social needs of the most at-risk middle school students. This orientation will allow us to study interventions identified as district priorities, as well as site-based initiatives. It will also allow us to continue to focus on how teachers are learning to improve their practice and meet the diverse needs of their students.

To learn about the range of intervention programs we began by surveying middle school principals as to the intervention programs they have in place or are developing at their site. We asked principals to identify programs that they believed held promise for helping their low achieving students to meet standards, and asked whether they would be willing to participate in the evaluation for this grant period. Consequently, we have selected a new sample of schools. The new sample includes a nice mix of continuing schools, which we have studied for several years, as well as some new schools to our evaluation study. Our new sample of Bancroft, Hamilton, Hill, Franklin, Long Beach Preparatory Academy, and Rogers also represents a better balance of focus and non-focus schools.<sup>1</sup>

We are aware that while we focused on interventions for the lowest achieving students this year, the district's comprehensive reforms encompassed a much broader range of issues. In August 1998 we wrote that "the district's progress with standards reform is best

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<sup>1</sup>This list is contingent on the willingness of the new principal at Franklin to continue to participate.

characterized as steady and ambitious, but with much work to do.” Work during 1999-2000 continued to be ambitious, but also experienced some significant interruptions that caused the district to diverge from its formerly steady course. There are a number of reasons for this:

1) Practically, a change in district organization, eliminating the old area structure put several efforts on hold until administrators learned their new jobs and established their priorities. The new superintendents for elementary, middle and K-8, and the new deputy superintendent needed to spend time getting to know the schools now in their charge, and principals had to learn about the expectations and working styles of their new supervisors.

2) In addition, as the state’s high-stakes accountability system continues to evolve, the district has had to go back and realign its standards with the changing state guidelines. Beginning next year, the state will be implementing a High School Exit Exam that students must pass to receive a diploma.

Although the test hasn’t been completed, and the levels of performance that will be required to pass have not been specified, the standards to be tested have been identified. As a result, the district is now realigning district standards to match the revised state standards, and they are working backwards from the High School Exit exam to determine the content of End of Course exams they plan to implement. These exams will become one component of their assessment system. This work pre-empted a lot of work that was planned for this year on developing performance standards and assessments in the content areas.

3) Furthermore, indicative of the complexity of standards reform, as the district tried to move forward on new initiatives, they have learned from problems encountered that required them to step back and do more groundwork. A notable example is the district’s experience with the development of performance standards.

In 1998 we observed that Long Beach Unified had taken a major step forward in developing performance assessments that are aligned to the content standards with the piloting of innovative districtwide performance tests. The assessments were designed to assess both content knowledge (science or history) and writing ability. While that first administration raised a number of issues regarding the technical quality of the tests, particularly regarding the reliability and validity of the scores, we found they had a very positive influence on the quality of instruction needed to prepare students for these new tests.

In 1998 we also noted that performance standards were the missing piece in the district's efforts to create a comprehensive standards-based system. Performance standards were needed to both raise teachers' expectations for students and to achieve consistency in grading practices. While standards had been identified for student performance on the district assessments, the district was working to develop measures to define how good is good enough "on multiple measures to demonstrate proficiency of the benchmarks and curriculum objectives."<sup>2</sup> We were told that performance standards would be rolled out during the 1998-99 school year.

In 1998-99 a significant step toward the development of performance standards was the introduction of the mathematics assessment portfolio, a vehicle for certifying that students were proficient on individual content standards. During the first pilot year teachers were asked to "play around" and experiment with the portfolios. In 1999-2000 they were required, and this first round of data collection will be used to determine proficiency on each of the standards.

From this experience, the Director of Curriculum, Instruction, and Professional Development realized the need to develop a whole bank of classroom embedded assessments for each of the standards before they could roll out an assessment portfolio in each of the four core disciplines. They will then need to pilot test and figure out how to score the portfolios, and how to develop a shared understanding of what is required to reach proficiency. These are all prerequisites to developing a standards-based report card. The math office is planning to begin work on this during the summer and the hope is to pilot a standards-based grading system for math this year. The revised goal is now to introduce the performance standards in math in the Fall 2000, and the rest of the content areas by the end of next school year.

At the same time, work was proceeding in a number of different areas. Efforts to improve communication with parents continue through the development of individual student academic profiles, which are comprehensive records of each student's achievement on a range of assessments, as well as the interventions provided to support student growth. Similar efforts have been instituted to

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<sup>2</sup>"Putting Together The Standards-Based Puzzle," by Chris Dominguez, Assistant Superintendent for Curriculum, Instruction and Professional Development.

improve communication among educators across the district through the publication of Standard Times, and a new slide presentation, "Putting Together the Standards-Based Puzzle" to help everyone understand the "big picture" of standards reform in Long Beach.

The Middle School Office was busy restructuring summer school offerings to address the needs of the lowest achieving students. There was also a new summer school program for ELL students, an important development as limited English proficient students represent the largest group of students scoring below the 25<sup>th</sup> percentile on the state assessment.

Significant progress has also been made in mapping out a five year strategic plan for professional development for new teachers, and a comparable model is also being developed for training administrators. The plan incorporates a thoughtful sequence of courses and supports to help guide new teachers as they learn to refine their teaching practices. The New Teacher Institute and New Teacher support providers, along with Essential Elements of Effective Instruction (EEEEI) and content specific training provide the back bone of the professional development program. In the second year, teachers will participate in additional EEEI training as well as Reading in the Content Areas. Even though providing quality professional learning opportunities has become increasingly difficult since the state eliminated eight professional development days during the school year, it is clear from these plans that the district understands what constitutes quality professional development, and that it is prepared to invest in teacher and principal learning.

While the district has several initiatives devoted to improving the quality of teaching (Seamless Education, BTSA, standards coaches, and EEEI), several interventions (to be discussed in the section on literacy interventions) have recently been put in place without the prerequisite professional development needed to ensure that every child has the advantage of a well-trained teacher. This is a concern as there is increasing evidence that well-qualified teachers do make a difference in student learning (Darling-Hammond, 1999; Haycock, 1998). Substantial evidence from reform efforts indicates that changes in course taking, curriculum content, testing, or textbooks make little difference if teachers do not know how to use these tools well and how to diagnose their students' learning needs (Darling-Hammond, 1997).

Last year we reported that there were so many new initiatives introduced during the 1998-99 school year that teachers experienced considerable stress trying to cope with all of the changes. We

observed that it was often the lack of thoughtful planning in rolling out these new reforms that added to the stress, and limited the effectiveness of their implementation. We noted that a lack of clarity of the goals, insufficient training and guidance, and the time to learn and experiment with new ideas (i.e., quality professional development) often resulted in poor implementation. From recent research there is growing consensus about what constitutes effective professional development (Loucks-Horsley, et al., 1998; National Commission on Teaching and America, 1997; Newman & King, 2000; Sparks & Hirsch, 2000; Stigler & Hiebert, 1999). All of these researchers, with minor variations, have identified a similar set of characteristics needed in quality professional development. The seven principles of effective professional development experiences, compiled by Susan Loucks-Horsley and her associates (1998) provide a representative summary of the components needed:

- a well-defined image of effective classroom teaching and learning;
- opportunities for teachers to build their knowledge and skills;
- training that models the strategies and practices they want teachers to use with their students;
- builds a learning community, where teachers can collaborate within and across schools;
- supports teachers to assume leadership roles;
- provides links to other parts of the education system (e.g., professional development is integrated with other district and school initiatives); and
- continuously assesses themselves and makes improvements to increase teacher effectiveness.

These seven principles can serve as benchmarks for evaluating the district's implementation of interventions designed to raise student achievement. Careful planning and consideration of these factors is critical at this juncture because of the complexity of integrating all of the components of standards reform to move to the next level. As noted in the August, 1999 report:

Long Beach has reached a point in this reform effort that is most challenging - figuring out how to bring about the changes needed in instructional practices that will help all children achieve at higher levels.

We have always been impressed with the coherence of the district's strategic plan for standards reform. Although progress has often

been slower than expected, they have always maintained a steady focus on their plans. In the October 1999 proposal to the Clark Foundation, the district made a commitment to refrain from introducing new initiatives for the 1999-2000 school year. They recognized the need to provide more support to the new ideas introduced the previous year and work on refining things already in place. While there are examples of thoughtful planning and careful implementation, supported by quality professional development during the 1999-2000 school year, (see the sections on LB Preparatory Academy and EEEI), we were surprised by the sudden departure from that course this year in their focus on literacy. Rather than investing in improving teachers' knowledge and skills, we were told that the district looked at programs that were fairly "teacher friendly," and didn't require a lot of in-depth training, because they recognized that they did not have a lot of middle school teachers with expertise in reading.

The focus of this report is on the district's investment in improving teacher quality through ongoing professional development.

We begin by reviewing what we learned about the district's menu of Reading Development classes, starting with the course to which the largest number of students were assigned, Breaking the Code, followed by ADD/LiPS and READ 180. Then we turn to an alternative school-based literacy intervention designed at Prep Academy. While literacy is the dominant emphasis of interventions for low achieving students, we also looked at two schools that have designed new math intervention programs for students who struggle with mathematics. Next, we provide a brief description of other interventions that schools have developed or adopted to further support students at risk of academic failure, which we hope to learn more about in future visits. Next we turn to a districtwide intervention targeting new teachers (first through third year teachers) in Essential Elements of Effective Instruction, which concentrates on teaching the fundamentals of good teaching. In the final section we examine the impact of standards coaches as a professional development strategy. In the conclusion we reflect on the lessons learned across these initiatives about the importance of quality professional development.

### **Literacy Interventions: Reading Development Classes**

Three years ago, (1997-98) the district began a serious effort to improve reading at the middle school level. Recognizing that too many middle school students are reading far below grade level, two new courses were developed to strengthen teachers' ability to teach reading. The district established a new policy to require all sixth graders entering middle school who scored below the 25<sup>th</sup> percentile on the SAT9 reading test, (schools actually varied on

the criterion they used, depending on the number of students and teacher availability) to take a reading development course.

Two Middle School Reading Institutes were designed for teachers who would be teaching reading development classes, or supporting students' reading comprehension development in the content areas. These institutes also introduced the district's new approach to professional development. Six days of instruction took place over several weeks, allowing teachers the opportunity to go back to their classrooms and try out the strategies they were learning, and then come back together to discuss their experiences. Teachers were provided with professional books, and given time within the course to read and discuss these texts. Although there was no in-class follow up (e.g., observations and feedback) teachers did have opportunities to discuss their experiences with colleagues at the next session of the course. Moreover, the course instructors modeled the strategies teachers were learning to use with their students. Teachers greatly appreciated the quality of the course and the opportunity to be released from their classroom to talk about practice.

At the time, a district Reading specialist explained:

What we've really found with our middle-school kids, our high school kids who struggle, is that for most of them the issue is not decoding. They are adequate decoders. What they don't do is comprehend what they read for a variety of reasons....I always say that in middle school reading you need more time, smaller class size, you need more materials, you need lots and lots of material: age-appropriate books with a range of reading difficulty, big classroom libraries. And the first thing is that you need teachers who are **specially trained**. (Emphasis added.)

1998-99 was designated as a voluntary pilot year for implementing reading development classes. A course outline was provided by the district, but each school had developed their own curriculum. Most of the middle schools did offer some kind of reading support that year, although the quality of the course varied across schools.

A course description for Middle Grades Reading Development was approved by the school board in April of 1999. Although there was no developed curriculum, the course outline delineated a comprehensive reading program aligned to the Language Arts standards, which included: flexible decoding strategies, comprehension strategies, vocabulary development, and metacognitive

strategies for comprehension and fluency. It recommended the use of a variety of instructional methods and strategies for whole group, small group, and individualized instruction using read-alouds, shared reading, guided reading, visualization and verbalization, literature circles, reading workshop, and a home reading program. Reading Development classes were required for all 6<sup>th</sup> grade students scoring below the 25<sup>th</sup> percentile during the 1999-2000 school year. Many schools chose to also provide a reading class for seventh and eighth graders with low reading scores.

Over the summer (1999) teachers worked to design the new Reading Development Course. Many of the teachers identified to teach the course had taken the districts' middle school reading institutes where they learned the strategies called for in the new course description. Unfortunately, there were not enough teachers who had been trained in reading to staff all the sections of reading development that were needed. One school had 21 sections. In that school, all 6<sup>th</sup> grade language arts teachers, whether they had any training or not, were assigned to teach Reading Development. At several schools, reading teachers reported that while teaching a new course for the first time is always a challenge, they were excited about the way students were responding to the class.

When I came back in the fall I had four ELL classes and one reading development class. And at that point, it was undefined. No one had any guidelines for me as far as reading development. The way that I understand it the district said, we need to make accommodations for students, we need to make sure that everyone is getting all of the help that they need, and so they said, reading development classes. And they weren't even sure at that point, I don't think, what it was. And it started off great. I loved reading development, because we read. We read a lot, and we did a lot of silent reading, a lot of oral reading, a lot of talking about our reading. We read fiction, non-fiction, newspaper, all over the place. And they [the kids] liked it, too. [Teacher B]

### **Breaking the Code:**

Two and a half months into the school year, reading development teachers were told they were to begin teaching a new program, Breaking the Code, as of the first week of December. Breaking the Code is a phonics program, which focuses on phonemic awareness and decoding skills. It is a highly scripted program and teachers were directed to implement Breaking the Code "exactly as it was

designed.”<sup>3</sup> The late start contributed to a number of issues that resulted in the program being poorly implemented. First, was the lack of training.

The district provided a one day six-hour training. Teachers were told that the lessons were all scripted and all they had to do was follow the manual. It was described as a “teacher friendly” program. They did not, however, have the manual available during the training. The consensus among teachers was that the training did not prepare them adequately to teach the course. A number of teachers shared their frustration with us:

It was very little training and the training that we had was not very informative and not very helpful. I think what threw people off at first was we thought well we could read it as we were preparing our lesson plans and then apply it that day and we soon learned that it really took a couple days prep to even figure it out. As matter of fact, it takes more prep than any other class. It’s a very prep intensive thing and you can’t just wing it or look at it that day. You can’t even study for an hour that day. You have to think about it and prepare materials and [...] You have to actually practice it and rehearse it in your head. [Teacher A]

The teacher's manual, especially in the beginning was a lot of reading, and a lot of prep time. And it was kind of delivered to me under the guise that your lessons are pre-scripted, right? Everything's easy. Everything's fine. But it's not, because if I read from the script in there, they would be throwing things at me. [Teacher B]

Even an experienced reading teacher found the training inadequate to learn the specifics of the program:

The district blew it with the training. Because they decided to go cheap on the training. The publisher suggested three days of training; the district packed all the training into five or six hours, which made it really hard, because the woman doing the training is trying to show just even the use of the cards that I was using with the kids today. One of the strategies they use is called

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<sup>3</sup>Breaking the Code, Fact Sheet for Middle School, a district handout for implementing Breaking the Code.

a blending board, which is the teacher putting up a single letter, and the kids sound the letter, and you do another and they blend the two, and you put another letter up. And she was trying to demonstrate that. She was trying to demonstrate the sentence lifting, which actually is an excellent activity. She's trying to demonstrate it all in a day, when it should have been spread out a little bit more. And no one stood up ever and said, Breaking the Code is a program that's going to progress so that you're going to start with phonemic awareness, you move into reading words, you get into some decodable text, and eventually you get into some comprehension strategies. All anybody knew was the phonics part. And I think possibly teachers may have been a little more receptive if they'd known eventually they were going to get to comprehension, that comprehension was not being thrown out of the window just in favor of learning a bunch of sounds. [Teacher C]

One of the reasons that the program required so much preparation was that teachers were being asked to teach many things they had never learned and that the training did not cover. The condensed training was particularly problematic for the large group of teachers with limited background in teaching reading.

Being a new teacher, I didn't know what this is, I didn't quite get it. So thank God for [our standards coach]. The other reading teacher taught first grade and second grade before so she's familiar with doing this phonics stuff. It was very, very new to me. That was one of the challenges. [Teacher F]

Even very experienced teachers expressed the same sentiment:

I'm department chair so I was one of the people that fortunately had some training but as far as it being a comfort level, at first no. I had to take the program home and I had to study it and I had to understand the concepts, the peripherals, anything that the program was using and how I was supposed to use it.[Teacher D]

For the teacher, the Breaking the Code is a labor intensive, very labor intensive task. And initially taking on the program, it really put a lot of pressure on me with my other classes, because it was a prep that required about eighty percent of my prep time to get a

handle on. Now later on, that became less and less of an issue. But initially it was a huge burden to get through and work out. [Teacher E]

The district did train literacy specialists to serve as consultants to work with teachers in the schools in implementing Breaking the Code, but this was also problematic. Coaches were more present at some schools than others. In some of the focus schools, teachers report either rarely or never seeing a coach, and when they did visit schools, teachers found that the coaches were not particularly helpful.

They provided one woman to come in and watch us and she was our link to the district if we have questions about Breaking the Code. It was problematic because she didn't know really what she was doing. She wasn't familiar with the program, she hadn't taught it. [Teacher F]

Until just recently there was actually a district person who came in once a week to observe and answer any questions or give us any help if we needed it. Not that she actually knew any more than we did but, she was there to study and learn it, through no fault of her own. [Teacher G]

Once the district began hearing from teachers that the initial training had been inadequate they arranged for some follow-up sessions to answer questions, and provide some models of effective implementation, which teachers reported to be very helpful.

Honestly I've been impressed with Cecelia Osborne and her people that work with her who have put together these meetings for all the Breaking the Code teachers to go to.

I think that's really important. They've been everything from question and answer sessions to demonstrating lessons. Just kind of those getting those discussions going with other teachers teaching Breaking the Code. So that's been really, really great. [Teacher F]

The second issue that affected the implementation of Breaking the Code was the way it was being mandated, creating substantial resentment among teachers.

My initial reaction to the imposition of Breaking the Code was, why didn't they tell us during the summer we were going to use this? Because the reading teachers here spent in the vicinity of thirty hours making a curriculum

map, using all the things we studied the last two years in the middle school reading institute and the middle school reading content area teaching. We'd really taken the content standards, and we had made what I thought was a mighty fine curriculum map. [....] And we'd started with the map, and we were going great guns, and all of a sudden this Breaking the Code thing came. As a teacher, it was really unnerving to all of a sudden be told, you're going to start teaching this now, and not have a clue what I was doing. [Teacher C]

Ironically, what got pushed out of the Reading Development Course was reading:

They gave us a calendar, and at that point, for, I think was almost ten maybe twelve weeks, we stopped reading, because the first fifteen lessons of Breaking the Code are strictly phonics. And then that's when everything changed. Everything changed. [Teacher B]

There's a lot less time for a discussion of what we read.

I think that it seems like the children haven't had the opportunity to develop the enjoyment of reading that I saw last year without Breaking the Code. And I'm not saying that Breaking the Code is a bad program, it's time consuming. Had we had it from the beginning of the year things may have been totally different. [....] Of course the first year of any kind of program no matter when you get it is work all the bugs out. I think that the teachers the reading teachers next year will have more of an opportunity **to work back in some of the stuff that we were trained to do.** [Teacher G] (emphasis added.)

After some initial success with teaching reading, teachers felt that their professional judgement had been usurped. They also felt that their students were denied an enriching and stimulating curriculum.

It wasn't something we had a lot of buy in with. It was like this is a program, you have to do it, you're going to do it. And there was a lot of resistance from some other schools apparently, but we just did it. It's supposed to be very, very structured and I've backed up on that because giving the kids six words out of context and then what does this word mean, use this word and they're supposed to use all of those words in a sentence,

talk about the context and honestly it took too much time that we did not have and I was not willing as their reading teacher to let the literature go out the window.

You saw us reading *Where the Red Fern Grows*. They love it. They love the literature and they need it. I mean the one thing that they need is to read and to love reading and to read, read, read, read. So I wasn't willing to let go and just have them read the stories in *Breaking the Code*, which are pretty dry. [Teacher F]

I don't think that it catered to our student needs. I don't think that anyone went around and was asking teachers of these students who would end up in *Breaking the Code*. [....] We're all here. These are the trenches. This is what it's all about, and just a little bit of input. It felt like somebody from the outside came in and sold the package, and then all of a sudden this became our existence. And I felt really robbed by that. I tried to keep it as positive as I can, but it really felt like that from the start. And I don't think that I'm alone in that. So I don't know. I think it's also one of those quick-fix solutions. [Another teacher] calls it the NASA solution. What is it? Better, faster, cheaper? Something like that, or more, faster, cheaper? And I think that's a lot of what it felt like, like a magic solution. And we're not living in a magic world. But there are solutions that are out there that would work a lot better, I think. [Teacher B]

We learned from teachers that the curriculum for *Breaking the Code* contains 30 lessons. Teachers found that unless they had block schedules it was not possible to complete a lesson in a single period. The program begins with looking at letters, and letter sounds and individual words. Over half of the lessons contain no reading at all. After lesson 17 they begin to incorporate very small pieces of reading -- a paragraph or two. The last eight or nine lessons start getting longer passages that are a little more difficult.

The third issue affecting the implementation was inadequate assessment to either place students in the course in the first place, or to monitor their progress. Many teachers questioned the appropriateness of the program for large segments of their class, especially for eighth graders.

While individual teachers used a wide range of assessments to assess students or to monitor growth, the general criterion for placing students in the course was their score on the reading portion of the SAT9 test -- a test that provides no diagnostic

information about a student's phonemic awareness or decoding skills. According to the district's Semi-annual report to the Clark Foundation, the decision to implement Breaking the Code was based on the "assumption" that students who scored below the 25<sup>th</sup> percentile in reading might have problems with decoding. In consulting with three different reading specialists, we were told that at the middle school level, phonemic awareness and decoding are issues for a very small segment of the students who are severely disabled readers. The failure to assess students' reading skills before implementing the program resulted in many students being assigned to a program that did not address their needs.

Although Breaking the Code includes its own assessment instruments, there was no training on the assessment part of the program, and since school had already started and schedules were already set, students were placed in Breaking the Code because they were already in a Reading Development class. The placement of students rarely had anything to do with an assessment of their reading needs.

The assessment has been a challenge for all of us-- not quite understanding it. We didn't even know what the grade breakdown was until a couple weeks ago [in May]. That's one of the things that I found lacking in the program to be honest is that I don't feel like there's a lot of built in assessment. I mean to say okay this is where they should be right now. That's one of the weaknesses of it. Basically the sounds are the assessment and we're told that if they don't pass those sounds they can't really pass the class. I regularly test them on the sound sets. Most of them have passed most of the sets but some of them it took five or six times before they mastered them. But that's the goal that they'll eventually master the sounds. [Teacher H]

Many of the course assignments, we learned were made based on space rather than need. One teacher explained that the cut-off score for assigning students to her class was the 28<sup>th</sup> percentile. There were eight students who had scores of 28 percent, but only two slots left in the class. So arbitrarily two of the students were assigned to Breaking the Code, and six took health instead.

Our observations and those of many teachers raise serious concerns about the appropriateness of this course for the majority of students:

One of the challenges that I face daily with these kids

is yes they're all second language learners, yes they all need some work with phonics, but I do have a handful of students who can decode beautifully but have no reading comprehension skills whatsoever and Breaking the Code does not offer enough of that in my opinion. [Teacher F]

It's not so much that they need the phonics instruction, it's that they need more reading strategies to help get more out of what they read. So I do think there needs to be more pretesting as far as identifying what their challenges are in reading. Do they need to know how to sound it out or do they just not get what they're reading? [Teacher H]

My range in here goes from first grade readers to eighth grade readers, really. So low test scores on the SAT-9 don't really mean that they need a phonics program. Some of them need comprehension work, and some of them need just test-taking strategies. And then some of them just didn't care, and so on a bad day or a bad week they got bad scores, and here they are here for the entire year. [Teacher B]

Teachers told us that they realize that most of their students need some kind of phonics instruction, but that they did not need the entire program. One teacher told us that none of her students needed all 70 sounds, some of them needed maybe 60 and some of them needed only seven. Perhaps one of the most important outcomes of teaching the course is that teachers became much more aware of individual student needs. For example, one teacher's experience in teaching the class made him more aware of the range of reading ability in his class:

My class split into two groups. One group was around the fourth, fifth grade level in reading. So they were about two or three years behind. They could comprehend, but they were slow, it was hesitant. It was like they had to struggle through the text at grade level. But at least they were fourth, able to decode successfully. The other half, a smaller group of my class, were down in the second, third grade level. I think there were six or seven of those students. Maybe not even that many. They were the ones that really needed decoding. They were still struggling with the short and long vowel sounds, those sorts of things. They still had some comprehension ability, but the decoding was keeping them from reading

at a level that was quick enough to keep up with the regular text. So for them, this course was probably the most appropriate. My question is whether phonics is really appropriate for eighth graders, one, and appropriate for students who are above a third grade level in reading. If they're reading fifth, sixth grade level, they're able to comprehend text and decoding generally isn't a problem. It's just basically reading comprehension they need to work on, and vocabulary. [Teacher E]

For many of his students the course only began to challenge them during the last few lessons:

[In the beginning] most of the kids knew the words. It's only now that we're at the end of the book and we're getting to some of the more difficult words -- what they call level three words. Words like spatial, emancipation, inflation, words like that. Enumeration, evaporation, those kinds of words start to give the kids a little bit of difficulty now. But it's taken all the way to chapters twenty-nine and thirty to get to those words. [Teacher E]

Similarly, teachers found the writing portion of the program was also too basic for their students.

When we were following the writing prompts this program asks the students to do it was actually some of the worst writing I've ever seen my students do. It's also, in my opinion it's not academic and our students, I don't want to say that they're often asked to do fluff but the prompts are, you know, describe these pictures, write a story, talk about a time you were scared. Those are all good things but at this level as seventh graders they need to be doing more academic writing, writing for history, for science, in order to be fair to them. That's what the other kids are expected to do and that's what they do all throughout high school even in their English classes they need to be analytical writers. So we need to teach them to do that even as second language learners and students who are below grade level in writing. [Teacher F]

A fourth factor that limited the effectiveness of this reading intervention program was the extremely large class size. With the exception of the higher achieving schools, we found class sizes of

35 to be the norm—far too big to teach reading effectively, particularly for low achieving students.

The lowest students are kind of out of it. They're not in a sense being helped because they have such attention span problems and this is now they're 12 years old and they can't read and they need definitely one on one attention and I can see that I have like three or four or five that are just falling through the cracks no matter what and I can't give them the one on one attention that they need. [Teacher A]

The class size was particularly problematic for administering assessments that require individualized attention.

I didn't get to do running records, as I should have been doing with the kids, which would be my ability to check through time the kids, but now they're just going to have that first running record and the last running record, okay, but I would have liked to have had more records of what the students were doing as they're reading. [Teacher C]

There is a “workshop” component to the program, where teachers provide small-group instruction to students needing additional help. It was suggested that this would be a time for the rest of the class to do independent reading and work on comprehension. However, none of the teachers we interviewed had been able to make time for either small group work or independent reading, even when they did have an aid to assist in the class. For most teachers, reading became a homework assignment. This was particularly true when teachers had 35 students in their class.

Finally, a serious issue affecting the program's potential success was the students' reactions. We talked to students in every classroom we observed, and the response was the same. Although they acknowledged learning some things that helped them to be a better reader, they hated the program and were not motivated to learn the material. Many said the class was boring “baby-stuff.” Motivation is a critical issue for this age group; unless students have interesting, age-appropriate literature it is unlikely that teachers will be able to engage struggling and reluctant readers in learning. Many teachers expressed concern about Breaking the Code's affect on students' self-concepts.

I don't think it was effective. I think what we've been

doing here with phonics, we have a phonics book, we have everything mapped out, everything - the curriculum is really good here. I feel very good about our curriculum as far as English goes and I don't think that "Breaking the Code" added anything to that at all. The kids were just like what in the heck are we doing this for? And there were a couple of kids probably, maybe 5 out of the 32 that really could use it - probably should have been sequestered and could have been taught it. But the kids were just irritated by it, they thought it was stupid and I'm like yeah, I can see why you think it's stupid, because it is kind of stupid, and it's really hard to give them a purpose. [Teacher K]

The kids hate the program. They don't like it. It's pretty dry and really boring.... I have very mixed feelings about it. The kids were horribly insulted when we first put the cards up. It's like I know the alphabet. These pictures are not middle school level. A little lamb, goo, that middle card. Cow. It was very insulting to them. Getting them to do a lot of activities has been very hard. [Teacher F]

When I showed them the materials, they looked at these pictures - they really felt like they were being condescended to. ....It's like when they came in at the beginning of the year and they saw the alphabet - you're going to teach us the alphabet all over again? I'm like, no that's just your word wall. 'You just think we're dumb!' So we have a lot of self esteem issues to deal with here so when they have a curriculum that they perceive is looking down upon them, they're not going to want to perform. [Teacher L]

Teachers acknowledge that there are many positive aspects of Breaking the Code, most important was heightening the awareness of both teachers and students about skills that many middle school students lack.

[The students] were really interested in the assessments, they wanted to impress me so much with those assessments. 'How'd I do?' [they would ask.] When I would do the running records, they'd ask, what are you writing? I'd go over it. They were really concerned about that. They seemed to get the most out of that part because it was something they could know right away, how am I doing, where am I at. That showed me okay, they realize that

there is a process to doing this, just don't go haphazardly. [Teacher L]

They are kids who are greatly at-risk readers. As an overview, I think Breaking the Code has benefitted many of those kids. I also use it in my English language development class, and I notice improvement with those students, also. I notice it partially in the ability to spell, maybe more so with the English language learners, because when they're writing, if I go over like checking an essay, I can say, wait a minute, what did you write? And they'll read to me what they've written. And the kids will usually say to me, oh, I didn't mean to write that. I meant, and they'll spell it the right way. [Teacher C]

Many teachers felt that the "sentence lifting" activity (similar to Daily Oral Language exercises) was a particularly effective instructional tool, and even began incorporating the strategy into their other courses.

One of the writing components that I do support is sentence lifting, where we take sentences from the student's writing, we put them up on the overhead as they're written full of errors and the students need to identify spelling mistakes and language mistakes and then we identify all the mistakes and write down the corrections and a T chart and then I leave the T chart up and the sentence as it was written incorrectly and the students have to use the corrections on the T chart to try and fix the sentence. So they do that one day and then the second day together we edit the sentence. And that's great. We have done quite a bit of that. But in doing the sentence lifting I've been lifting it from most of their History papers and other English assignments. [Teacher F]

Breaking the Code also reinforces a strategy that teachers are learning in EEEI, encouraging active participation to ensure that all students are actively processing information during whole class instruction. Teachers recognize that many students do need additional understanding of the mechanics of English, but they object to the scripted nature of the program that uses repetitive drills. Most believe that the skills could be more effectively taught in the context of reading good literature, where they are also improving their reading comprehension.

Obviously the big goal is just for kids to be better

readers but I think that we could combine our goals more effectively. Yes. I think overall it has a lot of benefits. We just need to find a way to help the kids enjoy it more and have it not be so boring. [Teacher H]

One very important benefit from Breaking the Code has been that teachers learned a great deal. Many of the teachers who taught the course had no prior training in phonics or reading. They have learned a lot about the structure of the English language. This experience should help teachers to recognize particular learning needs of individual students in the future.

I think it has made me more effective in just understanding how to help struggling readers because I don't have a lot of ELD background. It's helped me to understand where they're coming from and their needs and how they view words because they use a lot of inventive spelling that you just can't figure out where they're getting it from. At least now I'm seeing inventive spelling that is more phonics based. So instead maybe it's supposed to be "er" but at least they put "ur" or "ir". So it's making a difference. I do see that. That's one of the major accomplishments. I just wish that there were a way to make it less insulting to the kids where they feel like they're reading things at their level because I think they feel like we put them back in elementary school. [Teacher H]

Even a veteran teacher with substantial training in reading and teaching English language learners acknowledged that she learned new things.

Every once in awhile, I'll hit an explanation, and I'll go, gee, I never knew that. And so that's been kind of interesting. I know [another teacher] did the same thing. When I was telling the kids some rule or something that went with a pattern, she said, you know, that's just something that I know, that I never thought about it. If you looked closely at the cards, the last spelling on the card is usually the one you use at the end of the word. And a lot of the kids never realize that sometimes there are patterns, and so I tried to get them thinking about those patterns, too, when we go through. [Teacher C]

Interestingly, although no one particularly liked it, implementation of Breaking the Code was less problematic at higher

achieving schools. There appear to be a number of factors contributing to this observation. First, these schools had a smaller number of students scoring below the 25<sup>th</sup> percentile, thus a smaller number of students assigned to Breaking the Code, resulting in lower class sizes -- usually twenty or less. There also appeared to be a higher level of support at these schools. They tended to have more aids to assist with testing. Because only a few classes were involved, one principal was able to hire outside help to put together all the materials for the classes, saving the teachers tremendous amounts of prep time.

At one school, only a small number of special education students were assigned to Breaking the Code:

That's the complaint with most of the schools is Breaking the Code is fine for kids who are not able to decode, but if they're able to decode, why would you put them into another program where they're going to go through the same thing again? We're finding, though, that there are kids that need to learn how to decode. And that's why we brought it into our special education classes. [Principal A]

It was a frustrating year for teachers and principals who had to implement a program that many felt did not address their needs, especially without the resources needed to do it well.

I really have some concerns about how effective my reading program has been. I would not call it a literacy program. I will call it a phonics program, which is a far cry from literacy. So I am concerned about that.... I think we have to be very careful in middle school, because middle school non-readers are nothing like elementary non-readers. I think if you do not train your staff, your program is going nowhere. I don't care how good it is. [Principal B]

It was not surprising to find that there was relatively little improvement on middle school students' SAT9 reading scores this year. (It is difficult to interpret SAT9 data for Breaking the Code. Two schools registered significant gains, but the average gains across the district were small, 2.9 NCE.) Any program, regardless of its merits, is unlikely to effect student achievement if it is not implemented well. Moreover, it is unlikely that there is a easy solution to improving reading achievement at the middle school level. As Claude Goldenberg, associate dean of the College of Education at Cal State Long Beach, and an authority on reading instruction said:

[A]chievement test scores become almost stubborn as you go up the grades. The reading agenda in the early grades is much more weighted toward letters and sounds. It's more difficult to sustain the gains as kids go up the grades because reading is more cognitively challenging and requires the reader to bring more background knowledge to the task. *LA Times*, July 30, 2000.

Background knowledge is especially critical for helping economically disadvantaged and language minority students develop reading skills. Language, culture, and social experiences often limit the background knowledge students have to help them comprehend text, such as appears on the SAT9, which was normed on a population where only 1.8 percent of the children were limited English proficient. Breaking the Code does not address this important issue.

#### **ADD/LiPS**

Our limited introduction to Lindamood and Bell's ADD/LiPS program designed to teach phonemic awareness, has at this point been through the observation of a single LiPS class and the anecdotal descriptions from teachers and administrators. It is an intensive program taught to very small groups of students (5 to 1 student/teacher ratio). The goal is have students understand that a word is composed of a series of sounds and how those sounds fit together. From our brief observation we noted that many of the skills taught were the same skills we observed in Breaking the Code classes, although each program used its own esoteric terminology to describe the same phenomena. Moreover, in the one class we witnessed, we actually saw more reading and reading instruction in the LiPS class than we saw in any of the Breaking the Code classes.

Several teachers and administrators spoke enthusiastically about LiPS impact on students. They described the students who attended the intensive Reading Clinic at Stanford, (which we understand is based on the same instructional program as LiPS) as "completely changed" when they returned to their regular classes. We heard a similar story at another school:

For the boys that I had the first semester, I found they made tremendous growth in their ability to decipher words to decode words, to get contextual meaning, as a result of being able to do it without adult supervision and help. And that's probably one of the main basis of the whole program, is that a kid can do this without an adult around, because they have the tools now in which to

really decode and decipher a word and make sense out of it.[...] This is the first thing I've ever seen in my life as a teacher that it seems to make sense to the kids, and I really can't tell you why. It's almost like a miracle, sort of, that all of a sudden, they're starting to identify, and I don't even know if they could tell you why or how it works, but it does. It's probably the best thing I've done with kids in a long time. [Teacher O]

As with *Breaking the Code*, it is not clear what criteria were used to assign students to the class, nor what assessments, if any were used to monitor their growth. In contrast, READ 180 is a highly data-driven program that relies on numerous assessments to target instruction and chart students' progress.

### **READ 180**

Read 180, developed by Vanderbilt University, is a comprehensive reading program that combines individualized computer instruction, independent reading, and small group instruction. The program is designed to be taught in a centers format, for classes of 15 students, working with a specially trained teacher.

The computer station is one center, accommodating five students at a time. The computers are interactive, providing comprehensive ongoing assessments and almost instant feedback on students' progress in spelling, vocabulary, pronunciation, comprehension, and analytic skills. In the beginning of the year, students are tested to determine their reading levels, from there the program progresses developmentally, pushing students into more challenging material as they master each section. The lessons are previewed through a one-minute video that gives the students some background about what they will be reading. After the video they are presented with text that varies in length and complexity depending on the student's reading level. The computer first reads the text to the student, while the text is highlighted on the screen. Then the students read the same text aloud and the computer records the student as he or she reads. The recording is played back to the student, helping the students reflect on their own reading and work to read with greater fluency. The tests on the passages incorporate spelling and vocabulary, while the computer holds students accountable. If they spell words incorrectly, or mispronounce a word, the computer won't let them go on until they master those words. It also focuses on comprehension, incorporating exercises on identifying the main idea, inference, drawing conclusions, and learning vocabulary in context. As one teacher noted, "It complements everything we've tried to do across the curriculum areas." [Teacher P]

A second center is independent reading, where students are given a list of suggested READ 180 books that will be challenging, yet not frustrating. The computer program provides previews of many of the titles to pique students' interests. Many of the books are available on tape, so students can follow along as the narrator reads, enabling them to experience more challenging literature. At the listening post, as many as five students can read the same book, as a group or individually. The narrator on the tape, not only reads the text, but also stops to ask questions, or to think aloud, using the strategies described in *Mosaic of Thought* to model the strategies that good readers use.

The third station is teacher-directed instruction. Teachers use a range of assessments to monitor students' progress. They use running records, teacher-developed assessments, and portfolios to supplement the information provided by the computer. Because the computer can provide the teacher with continuous records of where students' strengths and weaknesses are, the teacher can tailor small group instruction to students' needs. The computer will issue alerts about the areas where students are having trouble, such as summarizing or inferencing. The computer records also allow the teacher to monitor whether or not the alerts continue on the same skill, making it possible for the instruction to be very data-driven and adaptive to student needs. For example:

If the teacher has a group of kids who struggle with main idea, then her purpose is to pull those kids together to teach them main idea. So it's assessing the kids along the way, giving the teacher a way of setting up his or her lesson in the small group instructions. [Teacher P]

Read 180 teachers are enthusiastic about the program as being "potentially excellent," but the first year has not been without problems. There have been numerous technical problems with the hardware, for which some teachers felt inadequately trained to address. The training, provided by the publisher, was limited and the teachers' manual did not address a number of the issues they encountered. In addition, Long Beach has attempted to stretch the program beyond its intended use. As it is an extremely expensive program, to accommodate more students teachers are using the program with 20 students instead of 15, by adding a fourth center, a writing center. The increased numbers have resulted in some additional management issues at the two stations where students work independently. Students often had a hard time self-selecting books and struggled with reading for 20 uninterrupted minutes. One school addressed this by assigning an aid to the independent

reading center to model sustained silent reading. They also added accountability measures, such as keeping reading logs, to keep the students on task. In another class, we observed that these struggling readers often had difficulties writing. An additional aid, or parent at the writing center might help the students stay focused and provide support by asking and answering questions.

Moreover, during the first year, not all teachers used all the components of the program. For example, the computer can preview the companion books. These "advertisements" stimulated a great deal of interest among the students. The program also utilized a point system to reward students for reading longer, more challenging books. One teacher who used this part of the program experienced few behavior problems in the independent reading center. On the contrary, students begged the teacher to get some of the books that they had learned about on the computer that were not in their classroom collection.

Technical problems notwithstanding, teachers and administrators were optimistic about the potential of READ 180 to help students discover the pleasure of reading, as well as develop their competency.

What's happening is you listen to these kids read, it's not just the part that they're reading with fluency now. They can comprehend. And this is the one program that I have seen that I can say, yes, this will show if a kid has made improvement. [Principal A]

Through the multiple assessments built into the program teachers have been able to document growth, however SAT9 gains were small.

We have seen growth in the Read 180. I mean, the kids, when we initially assessed, were all hovering around, on a structural level, around a third grade, give or take a grade or two. Now they're hovering around fifth. On the average they've progressed two instructional levels. There is still a ways to go, I mean, no miracles have taken place yet, but some minor miracles have. We've even taken the higher groups, the kids who were doing the best in the Read 180 and pulled them in and did group work with them and teaching them reciprocal teaching so they could go back into the classroom and teach those skills to the other kids. [Teacher P]

One school is working on designing a continuum of support, moving

flexibly into and out of READ 180. A very small group of students with true learning disabilities, who have no phonemic awareness whatsoever would go into the LiPS program. Another small group of predominately special education students would go into Breaking the Code. They have learned from their first year's experience that students need to be able to decode to benefit from READ 180. This school is in the process of developing a safety net class, where they will focus on the comprehension strategies taught in the Reading Institutes. They plan to use the textbooks from math, science, and history to teach students how to preview the chapter before they read, how to mask the chapter, giving them access to the textbooks. They plan to utilize literature circles, reciprocal teaching, and Socratic Seminars, to give students opportunities to talk about and write about what they are learning from reading. In each course the plan is to advance students when the benchmarks are achieved rather than at the end of a term. If such a course had been available this year, one teacher felt that he could have easily moved fifteen of the students into the next level.

This plan parallels the district's outline of a continuum of reading development courses that would target different reading difficulties that middle school students are experiencing. ADD/LiPS targets a very small population who are experiencing severe reading difficulties and have no phonemic awareness. Breaking the Code is aimed at students who have some phonemic awareness but have decoding problems. READ 180 and the "Janet Allen Model" adopted at Prep Academy (described in the next section) are more complete reading programs that incorporate phonics, vocabulary development, comprehension strategies, and wide exposure to literature. Whether these courses will address individual student's needs is difficult to determine without assessments that can be used to diagnose learning needs and monitor their reading development. A careful analysis of these programs is particularly important in light of some of the difficult experiences that both teachers and students had this year, and because there is not a strong research base to support the choice of some of these interventions. In a recent review of research on phonemic awareness training, Moustafa, (2000) indicates that research does not support phonemic awareness training to develop overall reading ability. Phonemic awareness training can be effective in addressing specific difficulties, but it is rarely the whole answer. Rather than phonemic awareness being a prerequisite to literacy, literacy contributes to phonemic awareness. As the author points out, most literate adults do not realize that there are four phonemes – not three – in the word "box," and yet they have no trouble reading and comprehending the word.

Most important to a coherent reading program are sound diagnostic tools to inform placement and identify student needs. There are many good reading assessments available, the best of which are labor intensive one-on-one assessments, which require trained teachers to administer and interpret the results. Buying a new curriculum is less expensive than investing in training teachers. However, no curriculum, regardless of how good, can substitute for well trained teachers. These observations point to lessons that are well documented in the research literature (Snow, 1998). Reading is a complex cognitive skill and students who experience difficulties with reading struggle for a variety of reasons. Effective reading instruction at the middle level requires trained teachers and diagnostic assessment tools that will help teachers identify and address the learning needs of individual students.

Long Beach Preparatory Academy (LBPA) is one place where an intensive investment in teacher learning did occur. Although LBPA was also required to implement Breaking the Code, the principal and English standards coach still implemented the literacy intervention they designed, which more closely followed the balanced reading program outlined in the course description for Reading Development. In this school, both teachers and students were more satisfied with their reading program.

### **Prep Academy**

The experience at Prep Academy during the past two years presents a vivid example of the power of thoughtfully-planned intensive, on-going professional development with consistent support. During the 1998-99 school year, Prep Academy had designated standard coaches, who were basically their department heads who also taught full time. Although the Language Arts coach had significant expertise in literacy and excellent rapport with students, she was limited in the support she could provide to other teachers because she had her own classroom. She did hold a weekly department meeting, but only a few teachers attended consistently.

Achieving only limited success with that model, the principal and the Language Arts coach, working together as a team, recognized that they needed to try a more intensive approach. The first two years of the school were focused on creating a caring environment for their troubled students. While keeping those supports in place, for the 1999-2000 school year the leadership team knew it was time to focus on academics. They narrowed the curriculum, eliminating social studies and science, and chose to focus only on literacy and math. The majority of the students were so disengaged from school that they knew it would take a tremendous effort to get them invested in a rigorous academic program.

The principal and the Language Arts coach (referred to as the staff developer at Prep) realized that they had to take the fear out of learning and show students that reading could be enjoyable, even exciting. They contacted Janet Allen, a nationally renowned secondary literacy specialist who had spent 25 years achieving remarkable success with adolescents who had been reluctant readers. They brought in Janet to help them plan their English curriculum and conduct professional development for the seven-member English department, many of whom were inexperienced teachers with limited background in literacy.

The principal and her staff developer did intensive training with the English teachers in the summer so that all of the teachers would be prepared for the first two weeks of school. The expectation that teachers would participate in additional training was made clear during the hiring process, but it was presented in a positive light. It would be a team effort, with a great deal of support. Janet Allen came twice during the year to provide training and inspiration. The message was 'this is great stuff, and we're going to have the kids on fire,' and the teachers would not be alone in this effort.

The staff developer explained their strategy:

I wanted to get them up and running on how to teach vocabulary and how to do the shared reading with novels because I knew it would be really overwhelming to try and get all the pieces in place at once. So in the weekly one hour meetings I gave them Monday we're going to read these pages- here's where you could go with this. You could do characterization, inference. I went in and modeled how I would read the readalouds, the shared reads, strategies to keep eyes on text-we made bookmarks.

I basically handed them lessons for the week and modeled them and taught the lessons to my group of teachers and they would go repeat it in their rooms. I didn't give them in writing, but sometimes I would generate six ideas on lessons and I would show them three real quick ways, with some additional written material that they could use to support their lesson.

She continued:

I pretty much preplanned for a week at the meetings for the vocabulary, for the shared reading - we tried to keep our strategies one thing at a time, a reading strategy or

literary element. For independent reading I gave them lessons. I did concentrate on one thing – the modeling I did. For example, we did guided reading every Wednesday.

I would script it out. Janet Allen did model the process twice for us, and I scripted every word she said so I had it to go on when I started doing my own. And then when she came out again I showed her a bunch that I'd done and she gave me feedback on it. So I got better at it, and they got better at it.... They did feel very confident by about Christmas and we were real tight as a team and they started sharing with each other which is great....I felt like we did key on something that really works.

The staff developer explained that their coaching model built in accountability. She kept teachers focused on refining their teaching. For example, she would go in each teacher's room and time their word of the day. In the beginning it took some of them 30 minutes to do it. The goal was to get it down to seven minutes. She would provide feedback on where she felt they were getting bogged down, and provided examples of how to handle those situations. Then she would model how she would do it. In some cases it took two months of consistent coaching, but they did get to the point where they could do it well in seven minutes. When she went in to observe she would just take notes and let the teachers see the pattern of their teaching. The staff developer provided assistance in every aspect of their teaching: lesson planning, content, instructional strategies, and classroom management, because she recognized that:

These kids were quite a handful—if you want to move them along in ten months you've got to have somebody that's very skilled at managing, and that's very skilled at teaching, because if your lessons are boring, forget it.

The staff developer felt the only limitation with this model was that she hadn't been able to spend enough time with all of the teachers, modeling in their classrooms, observing and coaching. She ended up spending extraordinary amounts of time with a few teachers who were really struggling.

I had three teachers who had never taught before and they needed me, so the other teachers got left on their own. I often stayed in their room and taught all day. I would model periods one and two and then they'd repeat it three and four. And when things got hot with the other

classroom, I'd do one and two here, and three-four there, and then hope they could repeat it on their own.[...] I needed to be in their rooms consistently. If there's a problem there, what do you do? If they didn't have the management or teaching in place, then it all starts to fall apart.

Staff turnover has been a perpetual problem at Prep Academy. Few experienced teachers choose to teach in this challenging setting, so the faculty has for the most part been made up of enthusiastic, but inexperienced teachers in need of intensive support as they learn on the job how to teach and how to handle indifferent, even defiant learners. With the sustained support of the staff developer this year, the English teachers at Prep were able to do more than survive; they were able to grow into the demands of teaching at-risk students. The impact of the staff developer's support was apparent in the significant improvement we saw in teaching and learning in classrooms. Students were reading good literature and they were engaged in learning, even continuing their conversations about a novel on their own during their lunch period.

Even the few experienced teachers valued the support:

We meet every week as the English department and we decide what books we're going to read, what chapters, we talk about the word of the day, questions of the day, so we plan everything out as a group so it's a real good support system because you're learning off everybody, it's not a teacher here individually doing their own thing. Same thing with the writing, and [the staff developer] is very knowledgeable, I've learned quite a bit from her. She brings a lot of elementary stuff which our kids have lacked. There are different strategies. So that has been really helpful. Our English department is very close, we always talk, we're always bouncing off ideas and just having the support system there makes a world of difference. She's always there to talk to you, she will help you plan out the lessons, questions you have she'll find the answers for you. She always brings in a lot of reading like when we were doing writing, she'll bring in, okay, read this, this will help you write poetry, this kind of stuff. She'll show us how she does a lesson. So she's very supportive. I can't imagine not having her here. Next year I could do it by myself but I think this year would have been very difficult without her. [Teacher M]

For the new teachers, the support of a coach has made the difference:

My mentor has been there for me on an individual basis. She's come into class and helped me teach before. She's observed me teach. Without her I would not be able to teach, there's no way. [Teacher K]

A new teacher who started in November after a number of substitutes who had not worked out, explained the type of support the staff developer provided:

I prep with her every day. She kind of helped me get my feet wet and helped me with some of the lesson plans and getting things together and working on classroom management so that helped build a foundation for me: the way we structured the room, the way we figured out the personality of the kids after a couple months I was here, to build a rapport with the kids, figuring out who can sit with who, who my strong leaders are, focusing on them to pull others in who are weaker. Getting us to maybe show more leadership and bring certain kids together as far as group work, stuff like that. We were going through it and then I'd implement it into the classroom. At first we discussed it and talked it out, there were days when she would come in and co-teach with me. But she helped me out the first couple of months, basically showed me the ropes and just gave me the ball and after that, after I knew how the thing worked or the system they were doing here, like the class structure, the word of the day and the way the curriculum ran. After that I was pretty much okay. [Teacher N]

Furthermore, the teachers also had the complete support from the principal who encouraged collaboration and made sure each teacher had all of the resources they needed to do their job well. For example, one day when she observed a lesson that impressed her, she asked the teacher to present the lesson to the whole department. She viewed it as an opportunity to give other teachers some extra extension activities on how they can apply the reading to a culture that was not their own. The teacher explained:

I presented a couple times during that novel to give them some background knowledge but I wanted to do something on dolls because there's a part where the girl gets a little white angel, she gets upset and doesn't know how to deal with it, and I thought these guys, they're not going to see it the same way I did. When I was little there were

no black dolls and if there were, they were always ugly.

Where now they have all these multicultural dolls so they're not used to that. So I told the principal, I need some dolls. She said what? I explained why, and the next morning she had all these dolls - here, is this what you want? I'm like yeah! So she's always been very supportive because like I said if it was something I wanted to do, or try, not only would she approve it, she'd get anything I needed. I need a bunch of dolls. She said okay, what kind of dolls? All kind of different color dolls, just dolls. Here, are these the dolls you want? Yeah. Or I need some books and the next day there would be two crates of books. So I got a lot of support from the administration because basically it was more that whatever you need to get the job done here. [Teacher L]

Finally, the additional assistance of an outside expert like Janet Allen provided both technical assistance and motivation for teachers to not give up on reaching their students. The English program was shaped by Janet Allen's literacy training, and supported by a dedicated staff developer and principal. Janet helped the teachers select the books for the year, she modeled lessons, taught teachers how to engage reluctant readers using shared reading, guided reading, books on tape, etc. Throughout the year Janet Allen continued to serve as a "coach" for the staff developer, through extended long-distance phone discussions. The combination provided an intense focus on reading development and strong support to both experienced and brand new teachers, via a lot of modeling, weekly team planning, co-teaching and consultations.

An important lesson that all the teachers we interviewed took away from their experience at Prep was the importance of building relationships with students:

The only way to connect with a teenager is through trust and relationships and the rules are different here -- generational poverty rules and what they value and what the middle class values are totally different things. If you're going to work here you have to understand that. Not judge it, understand it and work with it. You can show them a whole new world. [Standards Coach A]

The teachers were able to connect with these student through literature. The investment in supporting teachers to teach a rich and engaging curriculum enabled these teachers to fulfill the

pledge they made in their mission statement, to meet the needs of student, “by any means necessary.” Unfortunately, we learned that there would be significant staff turnover again this year, so they will need to start over with a new group of teachers. At least this time they have an excellent model from which they can build.

While the district has made literacy a priority, some middle schools have recognized the need to provide comparable support in mathematics.

### **Math Interventions**

As middle schools move to offer all students a standards-driven mathematics curriculum that prepares them for more advanced math classes in high school and college, they need effective extra help programs to provide additional support for students whose knowledge and skills are significantly below the district and state standards. In California, for example, the demand for interventions has been prompted by the implementation of rigorous academic standards and a high-stakes accountability system. The California mathematics standards effectively move algebra from the high school to the middle school curriculum. This created a need for interventions in middle school to support students who currently do not have the requisite skills needed to be successful in algebra.

To date, LBUSD has left it up to schools to design the interventions that best fit the needs of their students. Districtwide, a variety of intervention strategies have been tried out and put in place including after-school tutoring, extra classes and summer school courses. This past year, two of the middle schools in our sample provided more extensive math interventions. Our initial efforts to learn about interventions for struggling math students began by examining the approaches adopted in these two schools.

At both middle schools, we found that SAT9 scores had played a key role in assigning students to the intervention classes. Intervention teachers were confident that other criteria had also been considered such as grades and teacher recommendations. Once placed in the intervention, however, other than basic-facts tests, diagnostic measures were not used to assess students’ needs. At neither of the two middle schools were efforts made to systematically assess the mathematical capabilities of the students assigned to the interventions. That is, information was not obtained to plan more targeted instruction to evaluate progress.

We learned that the math teachers at each school worked collaboratively to design their intervention models. We also were told that these teachers had not received any special preparation for teaching the intervention courses, although all of the teachers we talked with received varying levels of instructional support from school and district administrators. Teachers indicated that they would be interested in additional training, as they were frustrated by their lack of awareness of effective practices that would address their students' needs. We are cognizant of the fact that there is a dearth of well-designed, effective math programs that can be used in intervention settings. Given this resource scarcity, it is difficult to know exactly what training teachers need. Yet, at a minimum, training with respect to using and interpreting diagnostic measures and alternative instructional strategies for low achievers would be helpful.

In both intervention models we found that the responsibility for the intervention classes was distributed among teachers in the math department, and that the intervention teachers ranged from being brand new to teaching to those that had 10+ years of experience. In effect, this practice gave many low-achieving students access to high quality, experienced teachers. At both schools we learned that very few students transitioned out, while a few students were added to the intervention classes during the course of the year. Appropriately, in the few situations where a teacher reported moving a student out of the math intervention, it occurred because the teacher felt a student had been misplaced or had made significant improvements. However, teachers felt that transferring students in and out of the interventions was difficult because it created scheduling problems. The concern is that students assigned to the interventions may have remained in the class longer than needed, and conversely, students found to need intervention support during the school year may not have been given access to this resource because of limited enrollment. One teacher admitted that more students at the school needed the support of Math Development than were currently participating. To be more adaptive to student needs, the intervention programs need more flexibility to allow more students the opportunity to participate, and to move students along when they are ready to meet the standards in regular math classes.

The two schools we observed implemented very different intervention approaches. One intervention model, referred to as "Math Development," replaces a student's elective. Students in Math Development attend two classes of mathematics--their regular math class and the intervention class for additional support--an arrangement frequently referred to as "Double Dose Math." To the

extent possible, teachers strive to align their instruction with the content of the students' regular math classes.

The Math Development teachers spent considerable time and energy planning the intervention activities. They incorporated a self-paced, computer-based mathematics program called *Larson's Middle School Math: An Interactive Approach* provided by the district. The Math Development teachers we interviewed did not take advantage of the Larson's training provided by the district. Larson's is a program designed to be individualized; however, with the exception of Prep Academy, individualization is currently not possible because of the limited number of computers available at most schools. As a result, Larson's was used in all of the intervention classes as a center-type activity with small groups of students. Beginning in September, those teachers teaching Math Development had also implemented *Moving With Math*. Moving with Math is a diagnostic-prescriptive workbook-based program that guides students through developmentally organized modules. The program places a heavy emphasis on the use of manipulatives to teach concepts, skills and problem solving. The Math Development teachers did not, however, use the complete Moving With Math program. They implemented the skill building component, but stopped using the program soon thereafter because they felt that the drill and worksheets bored the students. In addition, they were overwhelmed by the logistical issues associated with having students at different places in the program. In the end, the Math Development teachers shelved Moving With Math and turned to a combination of whole-class instruction and small-group activities. They felt the latter approach was also more motivating to students. Despite these experiences, we learned that Math Development teachers are considering utilizing Moving With Math again next year, but intend to use all of the components of the program.

In Math Development we observed students working primarily in small groups. Potentially, small groups can be a useful strategy for responding to the needs of low-achieving students because in this configuration the students can collaboratively engage in more interesting and difficult activities, learn pro-social skills, and learn about different approaches to problem solving. The group activities we observed, however, in the centers in Math Development were largely drill and review activities, and lacked coherence. In one teacher's classroom, for example, one of the six centers offered was reading. In the homework center in this same classroom, the students were allowed to work on assignments from classes other than mathematics. Even in a different classroom where all the centers had a mathematical focus, far too many students were observed playing around, or sitting passively while

one or two of their peers completed the activity. In another situation, students were organized into a group but they worked individually completing test-practice worksheets. It appeared that the centers, or group activities, served primarily as a mechanism for inserting some variability into class activities, and as a means for managing the students because in smaller groups the students were less likely to be disruptive. Although this arrangement permitted the Math Development teachers to provide more individual attention, the teachers we observed did not use small groups to provide alternative instructional approaches. Moreover, although the plan was to keep the number of students in the intervention classes below the number in the regular math classes, for reasons that were not always related to low achievement (e.g., discipline problems), the numbers of students in the Math Development classes ended up well beyond the 25 originally targeted.

Despite the promise grouping offers low-performing students, we recognize it is difficult to pull-off successfully with classes of all low-achieving students. Extra attention must be paid to identifying suitable, challenging tasks that encourage verbalization, critical thinking and collaboration. Opportunities for discussions, explanations and student interaction need to be built in to enhance the positive effects of collaborative grouping. Furthermore, all of the students in the group need to be held accountable for completing the task. Clearly, this is no easy feat for teachers already responsible for teaching three, four or even five other classes of mathematics. Additional training in cooperative learning strategies and additional help, perhaps from college aids or parents could provide the support needed to ensure that activities used with centers or groups are more effective. Research evidence suggests that **trained** adult tutors who work one-on-one or one-on-two with students can be effective, especially if tutors adapt the content and pace of instruction to the needs of students (Wasik & Slavin, 1990).

The second intervention model we observed involved placing students in regular mathematics classes that contained a maximum of 20 students. The goal of this model, commonly referred to as the "20-to-1 Class" was to provide students with more support (due to lower class size) in mastering the same curriculum that was taught in regular math classes. The 20-to-1 teachers wrestled with the issue of how to hold the intervention students to the same standards as their grade-level peers. One of the 20-to-1 teachers decided to give her students the simplest problems in the book, and to supplement her instruction using materials from lower grade-level resources. Another admitted to "watering down" the curriculum for the low-achieving students, and making

accommodations during testing such as increasing the time allowed or providing calculators.

In the school using the Double Dose Math approach, the teachers acknowledged feeling less pressure with respect to standards accountability because the intervention students were scored on a pass/fail basis only. One way to deal with these concerns is to actually involve these students with the more interesting and challenging work provided to all other students. One of the lessons learned from the Prep Academy initiative is that, many, if not most, low-achieving students are quite capable. The key to working with this student population lies in finding the right interesting and challenging learning activities that effectively engage these students.

One of the most consistent observations teachers shared with us is that the students in the math intervention classes needed a lot of help with their basic facts and computational skills. Consequently, it was not surprising to observe that a considerable part of the time in both intervention models was spent on practicing facts and routine problem solutions. While mastery of facts is important, there was no evidence that students were learning efficient strategies to learn their facts, such as using a known fact to derive an unknown fact. Students also had opportunities to practice computational procedures, but because this was largely done through doing worksheets, with limited teacher interaction or feedback, there was little opportunity for students to learn from their errors. Furthermore, this emphasis on arithmetic and basic facts effectively took time away from activities that could be provided to encourage students to think logically and discover math principles and ideas. The teachers commented that the students in the math interventions got bored easily. Given this observation it follows that these students need very different experiences and more effective experiences than we observed. They need experiences that address both knowledge application and knowledge acquisition.

In general, we found that students in the math interventions were being given very limited access to challenging material. Furthermore, teachers did not use alternative approaches to instruction that would help them understand the concepts and procedures that they had not understood through their previous instructional experiences.

Moreover, teachers' comments consistently indicate that the students in the interventions have negative views of themselves as learners and regularly engage in malicious social comparisons. One teacher shared her frustration:

I really have mixed emotions about whether it's good for

them or not because they don't have good role models in the classroom to follow. [Teacher Q]

To address the students' negative perceptions and behavior, the teachers tried to use games to make mathematics more fun. But the games are competitive and based on drill. One recommendation is to keep drill activities short and present them in a non-competitive format. Finally, incorporating more challenging learning activities will make a difference. While teachers tried to communicate high expectations to their students, instructional experiences based on facts and computation communicate low expectations. High expectations, revealed through the selection of challenging learning experiences, can make a difference in the affective and academic performance of the students in the intervention classes.

During our last round of visitations, we learned that consideration was being given to district-level staff designing the lessons for math interventions. While this may help teachers make curriculum choices, we hope that this endeavor will be a collaborative process between teachers and district personnel so that it can serve both as curriculum development and professional development. A lesson study approach (Stigler & Hiebert, 1999) could be an effective way to infuse the training that the intervention teachers need to implement more effective instructional approaches, and to provide an important professional learning community where teachers could learn from colleague's experiences and their collective expertise.

Finally, we offer a few additional observations that could strengthen math intervention classes. Intervention teachers agreed that the mathematics interventions should be scheduled early in the day. Students are more likely to be alert and attentive during the morning hours. However, an added advantage resulting from scheduling the interventions before lunch may be to enhance the perception of the courses as important components of the curriculum. In addition, as mentioned earlier, we are well aware that there are very few well-designed math intervention programs for middle school students in existence. There is also very little empirical data that shows that special homogeneous classes have a positive impact on mathematics achievement, particularly for low-achieving students. Even the intervention teachers had little objective information to show that the students had made gains. Similar to the reading interventions, assessments are needed to identify students' learning needs, as well as monitor their growth and to evaluate the effectiveness of the interventions.

### **Other Interventions**

During our visit we learned about a number of other intervention programs that schools have instituted to support low-achieving students. Some of these efforts are attempts to address socio-emotional needs, which we have found to be a major factor among students at Prep Academy. One school is using Title I money to fund a community worker who organizes their mentor program, does home visits, and monitors the progress of at-risk students. Another school has had success with utilizing the community-based Parent Project, which requires parents and students to participate together in working out problems at home and at school. One school has invested in PASS (Promoting Achievement in School through Sport), a program designed to teach students who are interested in sports that the same qualities that are required to excel in athletics (flexibility, concentration, balance, attitude, rhythm, instinct, relaxation, and power) are the same skills needed to be successful in the classroom and in life. The goal is to use sports to motivate students to achieve in school.

In addition to the math and reading intervention classes we have investigated, we learned about how one school has secured outside funds to provide additional support to students who often fall through the cracks. These are students who are not behavior problems, they are not special ed students or English language learners. "Alternative Schools with a Purpose" funds a self-contained classroom of about 15 multi-grade students who have not been successful, but who are often quiet, well-behaved students who get overlooked.

Each of these programs deserves closer study. The American Sports Institute, which sponsors the PASS program provides rigorous monitoring of the long-term impact of the program. We look forward to learning more about how these programs work, the strategies they use to engage students in learning, and if they are effective in raising student achievement. They are all attempting to address challenging issues that affect too many middle school students' academic experiences.

**EEEEI :**

During 1999-2000, a major professional development effort was launched with some of the focus schools. LBUSD brought back a course that had been a successful professional development program in the district several years ago. Essential Elements of Effective Instruction (EEEEI) focuses on the fundamentals of good teaching. It incorporates strategies that apply to all content areas, such as identifying an objective for a lesson and developing a lesson plan to teach to that objective. It also includes instructional strategies that encourage active participation of all students, and

for the teacher to monitor student understanding as the lesson proceeds. The district began by providing training to teams of teachers (first-third year teachers) from focus schools, as well as training a leadership team, which included administrators, standards coaches, and department heads, to provide on-going support at the school site.

EEEEI also includes a focus on student behavior and classroom management, another fundamental issue in effective teaching, as this teacher has learned:

You've got to get the classroom management down so that it's easier to get the academic content across. They talked a lot about teaching behavior and having to practice it. I went back and last week did a lesson on being able to work independently and the notes are still on the board. We did circle maps and talked about it the next day and told them they're having a test. So we're teaching students strategies too. [Teacher J]

After the initial training, one of the trainers, either Ernie Stachowski or Marilyn Bates conducted classroom visits with the leadership team at the site. All the members of the support team scripted a ten minute segment of the lesson they observed. Then they met in the hall to debrief and confer on how to share the feedback with the teacher just observed. The conversation with the teacher followed a general protocol. First, they would ask for the teacher's impressions about the lesson—how it went, what he or she would change next time, if anything. The support team always share with the teacher one strength they had observed, as well as one stretch that needed additional work. They would follow-up on the “stretch” in a few weeks to look for growth.

For the first year the observations focused on four of the essential elements, although the support team did adapt its attention depending on the needs of the teacher. One of the standards coaches explained the priorities:

It's still for the most part active participation. Teaching to the objective. Some of the others changed depending on the proficiency level of the teacher. If they have the active participation and the monitoring and the teaching to the objective in place, sometimes the teacher has been allowed to say I would like to work on this and then we come in and look at that. But for the teachers who don't have those other pieces in place it's those things all the time. The teachers are supposed to

turn in a lesson plan ahead of time that is labeled. It's a lesson plan for the whole period knowing that we'll only see ten minutes of it. If we don't see [what we are looking for] in the observation we look at the lesson plan to see if they had intended to do it somewhere. [Standards Coach B]

We learned that in the beginning, the level of anxiety was quite high and teachers were nervous about the classroom visits. But as the year transpired, the practice became routine. These expectations blended well with the other interventions at the school and have contributed substantially to developing a more professional culture at the school. One teacher explained:

We've all had the same training. We have the common ideas and we use a certain vocabulary and we know what we're talking about. It also has relaxed a lot of the tensions of being observed in that it kind of opens the door for people to talk, just talk in general, informally and I think that was probably the biggest impact is just having people relax and look at each other's work in a kind of non-threatening situation. I think it's a little easier for them to see me than maybe to see someone from the district in that way. And then like we get together and have a little formal talk but they also know they can come and talk informally. It's kind of a grade level thing because we're in the same buildings we can kind of visit each other and we have the same department meetings. We also do student [work] analysis together so it's kind of like three forums where these things creep into the discourse. That's really helped immensely. [Teacher A]

This collaboration and on-going support has produced visible changes in classrooms across the school. One member of the support team shared her observations with us.

All of their classrooms were definitely focused. Now I'm not going to say that they have every component, they haven't every component or how to use every component to their full advantage but they're certainly moving in the right direction. [Teacher D]

Another member of the team reflected on the growth she had observed:

I would say the largest growth that I have seen across the board in people has been in the area of at least formulating the objectives and trying to teach to it. More teachers are aware of having an objective for the lesson. [Standards Coach B]

As this teacher demonstrates, teachers understand the purpose of what they are being asked to do.

One of the main goals is to have the teacher stop and think what do my students need to be able to do to accomplish, what do I want them to do and what do I need them to know in order to get to that point. It's breaking things down [task analysis], knowing the objective. [Teacher J]

The coach continued with her observations:

I guess the other one that has had an impact on teachers is the active participation. More of them are at least trying to involve more kids in the lesson. For many of them it's still very simple things like thumbs up, thumbs down. Or the write it down on a piece of paper and now share it with me. At least they're trying to do something other than what they normally do: talk, talk, talk, talk, talk. So there's just been growth in that area. The piece that concerns me and it concerns me about EEEI and it concerns other people who have been through this, particularly the trainers, is that idea of the rigor of the objective. So we could say yes that's important but we have teachers that didn't even understand they had to do one so the fact that they're able to make one that makes sense that's where we have to start.

The first year of EEEI has been a powerful program. Several teachers told us that it was the best training they had ever had. There are plans to bring more teachers into EEEI next year. The district has been developing a cadre of trainers to build in-house capacity. In addition, all new teacher coaches will be trained in EEEI to provide additional support to teachers going through the course. The combination of all of the resources invested in supporting EEEI, has already proved to be a productive intervention, as one principal observed:

It's really empowering a great many of my teachers to either be a support person or to actually go through it

and utilize it in the classroom. And the way the model is set up, the reason why it's working is the accountability factor is very high. After you go to a training, people come into your room. You go back to a training, people come back to your room. You stop the training, and the site takes over the classroom observations. [Principal B]

Like EEEI, the standards coach concept was not designed to provide direct assistance to at-risk students, but by providing support to inexperienced or ineffective teachers, they have had a significant impact on improving the quality of instruction these students receive.

### **Standards Coaches**

The role of standards coach has evolved from an experiment in Area B with half-time literacy coaches during the 1997-98 school year. The following year the district chose to use a combination of Clark grant monies and Title I funds to expand the coaching model across all areas. A number of variations of the model were established, ranging from a 20 percent-time coach to half-time subject specialists, to full-time coaches who worked with multiple schools, to the most in-depth model at Hamilton, where four full-time standards coaches -- one in each of the four core disciplines -- supported the implementation of standards-based classrooms. In 1999-2000 four additional technology standards coaches were added, supported by a technology grant, to help teachers use technology to enhance their instruction in mathematics and language arts.

Standards coaches have been able to provide a level of support to department teams and individual teachers that had never been possible before. Even with the support of many dedicated BTSA new teacher coaches, standards coaches have devoted most of their efforts to providing additional support to new teachers. The standards coaches have been able to provide the follow-up in-class coaching to guide teachers as they develop classroom management skills, develop lesson plans, and learn to use EEEI strategies of teaching to an objective, encouraging active participation, and checking for understanding. As the example at Prep Academy demonstrated, the intensity of support required by new teachers who struggle to learn their content and pedagogical strategies while learning to work with challenging special needs students (special education, ELL students, and struggling readers), exceeds the capacity of even the best BTSA coach who has their own full-time teaching load.

This spring, the district held an end-of-the-year forum and reception (May 16, 2000) to recognize the contributions of standards coaches. At this session, coaches in each of the content areas reflected on their accomplishments during the past two years.

Although the lists varied somewhat by discipline, some of the common achievements across all content areas included:

- teachers have increased their understanding of how to use curriculum maps to focus instruction;
- teachers use common standards-based assessments;
- growing use of thinking maps as an instructional tool;
- increased collaborative planning within departments;
- increased links between assessment and instruction; and
- although far from widespread, many more departments have recognized the value of analyzing student work to inform their instruction.

Although there are numerous examples of the impact of standards coaches in all of the different models, it is probably easier to document the significant role that coaches have played at Hamilton, which benefitted from the most intensive level of support.

At Hamilton, after two years of four (almost) full-time standards coaches there are definite signs that the culture of the school is changing. Before the coaches came on board, Hamilton was a school that suffered from constant teacher turnover and a culture of low expectations for their students. The principal had already begun to develop a leadership team from the ranks of the young and inexperienced staff. The coaches have been able to support department heads in keeping department meetings productive and engaging in more professional conversations. Now, content standards are not just displayed in every classroom, they are the focus of instruction. As one standards coach explained:

Across the school people are more open to meeting and having conversations about the work they do and not just kid gripe sessions. That still goes on too. You hear more professional dialog. Even the new teachers coming back from EEEI you would hear them talking about oh this is my 'anticipatory set' or I'm going to try this for 'active participation.' They were talking to each other about that. And talking to each other about it in the open, not behind closed doors. There's a growth.  
[Standards Coach B]<sup>4</sup>

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<sup>4</sup>A long conversation with all four Hamilton coaches over lunch makes us confident that this coaches' sentiments are representative of the group. Unfortunately that conversation was not recorded, so we have had to rely on the voice of two of the coaches to relay the Hamilton story.

Teachers agree that the standards coaches have helped create a safe environment where teachers are expected to participate in professional development and continue to improve their practice. Yet, they are also given lots of support as they try new things.

When you have a high percentage of the staff on emergency permit and a high percentage of the staff is still trying to learn their trade, when there's something new interjected into what needs to happen in order to deliver the curriculum, I think a lot of times it can be received with some resistance because, [teachers feel like] I'd really like to learn this first so that I can be better at what you're asking me to do. And what's wonderful about this staff is because of the training they've had an opportunity to say, you know, I thought I was going to be able to learn my craft first, but now I see that an opportunity has presented itself where I can just go ahead and do both at the same time and they're supporting me. They're not just throwing me out there. There's a safety net if I happen to fall off the tightwire. [....] That net is our academic coaches which is wonderful. The fact that we have a site administrator that's willing to go the extra mile to do whatever needs to happen in the department for our teachers. If it's release time or whatever for student work analysis. Those are times where teachers can get with peers and people that they feel are more comfortable with the process and really start to pick their brain and find out what they need to do. [Teacher D]

The coaches' skill in facilitating these sessions has helped to foster a collaborative culture where teachers are now comfortable in discussing their practice, sharing ideas, and seeking help when they run into situations they are not sure how to handle.

During our department meetings and our student analysis the newer teachers do ask questions and do say, 'I'm having trouble with this, what do you do? What is really an appropriate kind of a lesson plan?' I think there is a dialog that goes back and forth where we all kind of help each other and the newer teachers kind of gauge where should they be. Are they doing the right thing? We give them materials and things that we've accumulated over the years. [Teacher A]

Two areas where the standards coaches have left their mark has been in their work with department heads to build their capacity, and in the growth in teachers' appreciation for, and ability to analyze student work. Last year teachers were reluctant to bring in samples of student work to share. When they were given opportunities to look at assignments that other teachers had given, they weren't sure what to look for. Recognizing that it would be necessary to begin with non-threatening experiences to reduce teachers' anxiety levels, the standards coaches wisely began by using classroom-embedded assessments, where everyone brought in work on the same assignment, that were not teacher created. They began by having teachers actually score the work during the meetings. This exercise revealed that the grade levels were in different places, and would need to proceed at different rates. In one grade level there was a great disparity in the interpretation of the score-points of the rubric, so they needed to devote considerable time to getting the members of the department calibrated to a common understanding of the rubric.

A standards coach described the progress she'd observed:

I think the student work analysis [has been significant] in that it has engaged both departments in professional dialog that they haven't had before, but what I have noticed this year is that all discussions have always focused on (a) what they see kids doing and (b) what does that mean they have to do. It hasn't degenerated ever into a blame the kid gripe fest. The kids could only do such and such and we could do better. We've always kept them on the high level and they have all participated that way. There are individuals in the department, if we allowed them, who could turn it into a gripe fest. But they have all come with the idea in mind that we're looking at improving our practice so the conversation is on that. What do we need to do at this time or what's one thing will we try to do next time? [Standards Coach B]

Across the year, teachers grew more comfortable with discussing student work and reflecting on their own teaching. The protocol they used was to first describe what they saw in the work. Then they described what they wished they had seen in the work and discussed what it would take to get there. Then they decided as a department which of the things on the list of next steps they would make their priority for the next month. The next month they brought back student work to look at the progress students had made, scoring it once again. They also monitored their efforts by keeping track of the percentage of students who were proficient

versus not proficient.

The coaches have simultaneously worked to get department heads to take on greater responsibility for the process. With the coaches encouragement, the department heads have been able to step into the role.

She just picked up the ball and she started running-organized people, meeting with new teachers. When I handed over the reins of the student work analysis she accepted that and ran with that. [Standards Coach B]

Getting to this point took time and persistence on the part of coaches. The first year there were a number of teachers, particularly experienced teachers, who were resistant, but the coaches patiently worked at building trust. We learned about one individual teacher who would shut his door and didn't want to have anything to do with coaching. He blamed the schools low scores on "those kids." But for some reason this year he began to listen to conversations taking place in department meetings; he began to try some new things. One of the coaches described the transformation:

He's not the [same person] who was there last year. He's truly an example of being able to teach an old dog new tricks. When he found out that there was a possibility that [one of the coaches] would not be there next year he even came up to her and said well we haven't always seen eye to eye on everything and I haven't always, and I still don't always think that we needed you here, but I have to say we do need you here. You have helped the department a lot and I don't know what we will do if you aren't here next year to guide us. You helped keep me on track. [Standards Coach B]

Overall the growth across the school has been substantial.

I think [teachers are] beginning to understand implications of the standards and that it really does mean that everybody has to meet the standards and that's a scary thing. That means I'm the person responsible for it if they don't all meet standards so the accountability piece is there. I think that when we first got here, there was more of a tendency to write off those kids that we knew weren't going to make it. 'Oh well, he's never going to do it so I don't have to worry about him, I'll just concentrate on these kids.' I think you hear more conversations about how you get at helping those kids. And even 'those kids' is not uttered with the same connotations as it has been in the past. So there is growth in that. [Standards Coach B]

Indeed, changing belief systems is one of the most difficult

challenges of standards reform. The important factor has been that a number of different interventions have worked together toward the same goal and are now producing significant growth at Hamilton.

I don't know if the growth, well let's give credit to everybody. The growth and change has been a combination of the student work analysis, input from coaches, front loading from the EEEI strategies. I don't think you can single out any one item. And I think that if anything, I've been here just to follow up on the EEEI, and the student work analysis. Maybe the coaches have provided this accountability. [Standards Coach C]

Evidence of growth at Hamilton goes beyond teachers' and coaches' impressions and anecdotal observations. Test scores are beginning to improve and Hamilton met its API targets (Academic Performance Index) for 2000. Scores on the eighth grade district performance test have risen consistently each year in all areas: content, rhetoric, and conventions,<sup>5</sup> even though the content of the test (U.S. Constitution) is conceptually more difficult than two years ago. Perhaps if other schools had experienced this level of support they would have chosen to devote building funds to continue having coaches. Hamilton is one of the few schools that has committed to continue funding their coaches.

All of the coaches we interviewed acknowledged the significant investment the district has made in them by providing training in a number of areas: thinking maps, SAT9 Prep, reading strategies, adult learning theory, curriculum mapping, Understanding by Design, EEEI, Breaking the Code- the list is extensive, and sometimes overwhelming.

It certainly expanded my knowledge base about a lot of things. The down side is it's expanded my knowledge about a lot of things. I really wish we had a focus for the year and that our training was in that focus area so that we could really work on something in depth. I have appreciated all of the training. I have not attended one that I would say was a waste of my time and I wish I hadn't

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<sup>5</sup>Although rubric scores have uncertain reliability, we believe that the improved scores demonstrate real growth. Especially in light of the reports we heard from several schools that exchanged papers with another (often rival) school to score. Teachers report considerable competition and the tendency to be harder on the other school than they were on their own students.

attended it. But a lot of the training that I had was the one shot deal or maybe it was two or three sessions. This year they have been lengthier but we've juggled a lot of different things. I guess there was a focus with EEEI, but then I went to UBD (Understanding by Design). I did the Middle School Reading Institute. We had Adult Learning Theory. We did Stanford 9 interpretation with somebody from the county office. They have expanded my knowledge base but I wish there had been a focus so that all of my work could have been in one area. I'm the type of person that when I go to these sessions there's this part of me that immediately says, 'so how does it fit in my world and what can I do with it?' [Standards Coach B]

However, the training of standards coaches has been uneven in that not all coaches received all the training, and coaches have not always had opportunities to put into practice all they were learning. Other coaches have commented on the ideal situation the four coaches have at Hamilton. They have demonstrated the power of this collaborative arrangement in the issues that they bring up at coaches meetings, the depth of the questions they ask, and the ideas they share with others. The opportunity to try out ideas and get feedback, to continue conversations about what they've learned in professional development training, helps each of them develop deeper understanding and internalize what they've learned. Unfortunately, there have been few opportunities for coaches at other sites to engage in the same kinds of conversations with their knowledgeable colleagues. Coaches indicated that after the first organizing meeting this year after the district reorganization in November, they were optimistic that their monthly meetings would provide a forum for sharing and collaborating. This never materialized as meetings were largely used to disseminate information rather than for further professional learning. In some content areas, the curriculum leaders provided opportunities for these conversations at their department head meetings, but it was not a consistent practice in all curriculum areas. We feel this was a missed opportunity. There is substantial research evidence documenting the power of professional networks for developing expertise and leadership skills. (Lieberman,1995; Swanson, 2000)

At Hamilton, the four coaches were able to create that professional support network for each other.

When I'm having trouble with something and I can't problem solve, I've got three wonderful resources. I don't have to go searching. My first stop is going to be here and between the four of us. I really believe that is what has made this program here at Hamilton so successful, because we really do support one another. [Standards Coach C]

I think that having the four of us full time has been what has helped people come along. I don't think if any one of

us was here alone that the same kind of changes would have been made because you just couldn't help all those people and be all things to everybody in all the content areas when you're an expert in only one or two. I am sorry that we are sort of leaving it up to schools to find the money themselves because I really think that everybody should have full time coaches, plural, on site. There's teaching half-time or teaching all day and having two periods off which is Stephen's model or serving two schools or three schools. Something is better than nothing, but the power isn't there. [Standards Coach B]

This is the reason that we are concerned about what the district calls "transitioning and institutionalizing" the role of the standards coach into the work of department chairs. It is unfortunate that they have required schools to fund the coaches out of their own building funds, as most schools have chosen not to support the position.<sup>6</sup> We have both observed and heard the testimonials from dozens of teachers about the difference that the support of standards coaches has made in improving classroom teaching. It has been one of the most effective interventions for improving teaching and learning that we have seen in the district.

The major limitation of the standards coach model has always been that there were not enough coaches to address the needs at all schools. The example cited earlier at Prep Academy is a powerful case in point. The coaching model did not become effective until the teacher left the classroom and became a full-time coach. A number of administrators agreed with us that the Hamilton model, although expensive, is the most powerful model. Half-time coaches have also made significant contributions at their sites, however they were not able to work with the number of teachers that full-time coaches could. There were often conflicts between their teaching and coaching schedules that made it difficult to work with teachers who wanted and needed their assistance. Moreover, full-time coaches had a real impact on changing the culture of schools.

They were able to devote more time to supporting department heads to take on greater leadership roles. In addition to providing much needed support to individual teachers, they were able to invest the time in planning and conducting professional development at the department level, and across the school they were able to encourage professional dialog and foster collegiality within departments. These are significant accomplishments that require time.

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<sup>6</sup>LBUSD's Semi-Annual Report to the Clark Foundation. Many non-focus schools receive substantially less federal funding, making it difficult to allocate limited resources to support a coach out of building funds.

We support the district's efforts to build leadership among department heads, especially providing additional staff development in the important tasks of curriculum mapping, analyzing student work, assessments and performance standards. We do not believe that without a significant reduction in their teaching responsibilities, (at least half-time) that department heads can take on the work of standards coaches. Even in the district's description of the duties of the two positions, while there is some overlap, critical roles that are essential to the role of standards coach will not be assumed by department heads.<sup>7</sup> They will not assist teachers in the development and delivery of standards-based lessons. They will not conduct collegial conferencing, observations, or provide feedback to teachers. These duties are the essence of being a coach.

Some coaches will move into new roles that include some coaching (e.g., EEI coaches), but several coaches struggled to understand why the district had made the investment in them, only to drop them after two years. These coaches have acquired significant experience, knowledge and skills to provide the kind of support that many less accomplished teachers need. Rather than institutionalizing the role of standards coach, this "transition" actually represents a significant reduction in support to classroom teachers.

### **Conclusions:**

Looking across all of the initiatives described in this report, a consistent pattern emerges. The interventions that have been the most successful (at least at the level of implementation, if not at the level of improved test scores), have been the programs that were supported by quality professional development. The depth of training and on-going support provided for the English department at LB Prep, EEI training for focus schools, and the quality coaching standards coaches have been able to provide to individual teachers and department heads all incorporate the major elements required for effective professional development.

These programs provide substantial opportunities for teachers to build their knowledge and skills over time through on-going training where exemplary practices are modeled. Moreover, each intervention involves follow-up coaching with observations and feedback, providing support to teachers as they practice and refine

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<sup>7</sup>LBUSD's Semi-Annual Report to the Clark Foundation, Attachment #5.

their skills. They also involve a critical nucleus of teachers learning together, which provides a collaborative learning community where teachers learn from each other as well as from experts. Finally, they build in accountability by monitoring the effectiveness of the training on teacher practice.

In our August 1998 report to the Edna McConnell Clark Foundation we wrote that we were impressed with “the overall positive spirit that permeates the district, and the enduring commitment to improving academic achievement of all LBUSD students.” While the commitment to raising achievement remains, the spirit within the district has changed. We believe that change is a consequence of increasing pressure from high stakes accountability measures at both the state and district level. We realize that the pressure is immense. We also understand the sense of urgency the district feels, not just to avoid sanctions, but for the future of the children currently in school. However, as we are learning from research on teacher development (Stigler & Hiebert, 1999), improving teaching is not a short-term proposition. Real improvements are more likely to result from a long-term investment in teacher learning that produces gradual, incremental gains. Increasing teachers’ knowledge of content and pedagogy is to date, the best way we know to increase student learning (Darling-Hammond, 1998). LBUSD has many talented teachers, but they need greater opportunities to develop their skills. As we have noted, the district does have some excellent models from which to build, as they design much-needed additional professional development to support teachers.

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