

STEP: The Supporting Teacher Effectiveness Project



Adaptive Positive Deviance
in Education

Cover images:

Judy Moses, who teaches advanced students at Lindbergh, pauses for reflection.

Teachers collaborate on the plans for STEP future.

Franklin history teacher Tom Cordova traces professional network connections.



New Notes *for Teaching and Learning*

By Prucia Buscell
and Curt Lindberg

After talking to faculty colleagues at Franklin Middle School, music teacher Andrew Fitzgerald decided to have the 55 students in his concert band and string orchestra practice their writing as a prelude to playing their instruments as they prepared for the spring concert. To his delight, their May musical performance was the best he'd ever heard.

Fitzgerald had always taught his students the vocabulary of music. They knew about tone, pitch, harmony and major and minor scales. But this assignment was different. Fitzgerald asked the students to listen to a recording of one of the concert songs, study the conductor's score, which has instructions for all instruments, and then write an essay on how they were performing as a musical ensemble. And he asked them to "analyze" reasons put forth in their "critique."

"They did, and it was cool to see how specific they were," Fitzgerald said. "It fit in with what we were doing. The writing helped them become better musicians and it improved their performance. They knew what they had to do to be better. Academic vocabulary used this way was brand new."

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Fitzgerald is one of some 24 teachers and administrators from Franklin and Lindbergh Middle Schools who joined the Supporting Teaching Effectiveness Project (STEP) in California's Long Beach Unified School District (LBUSD). Funded by the Bill & Melinda Gates Foundation, the project aims to help discover, develop and diffuse strategies that help K—12 educators maintain continuous growth in teaching effectiveness. Six months of intensive work in the two schools has generated enthusiasm, a strong sense of community among teachers, and promising early results. Teachers, principals, and district representatives formed multi-disciplinary teams at both schools with in-house facilitation led by Edward Samuels, a former math teacher, and Tracy Fiala, a former kindergarten teacher. Plexus Institute President Jeffrey Cohn, MD, MHCM, and consultant Mark Munger, EdM, CAS, coached the teams in using Adaptive Positive Deviance (APD), a collection of field-tested change processes, to uncover successful teaching practices and learning opportunities and identify the conditions that generate them. STEP is the first use of APD in schools.

“What’s been accomplished in six months is important and exciting,” said Dr. Cohn, a physician who led a successful Positive Deviance-based effort to reduce healthcare associated infections before joining Plexus. “It appears the pattern of interaction among teachers has changed dramatically in these two schools. The previous pattern of communication occurred within departments, and within departments within grades. Now there is teacher interaction and collaboration across grades and departments.”

The district has a long commitment to continuous improvement and professional development. STEP fit philosophically but the approach was new. Assistant Superintendent Pamela Seki knew the research indicating teachers often plateau mid-career. She was intrigued by the idea that APD might counteract that, and curious about the process. “We were in the midst of a very dramatic shift in our work here, with Common Core, which was being imposed top down, and here was something coming in that was polar opposite to that,” Seki said. “We’re not always top down. We have a rich history of facilitating pilots in individual schools and using data and growing them up. But now with the new Common Core, to make sure all the schools were making all the changes needed by Common Core at the same time, we’ve been top down.”

By the end of the 2013-2014 school year, Seki felt Common Core and the APD approach were “absolutely” a complementary pair.



Franklin teachers Marnelle Leonard and Elizabeth Duty lead a discussion of STEP discoveries.



Franklin Assistant Principal Roshann Williams reviews the team’s success stories.

“The teams have done incredible work in a few short months, and they have mobilized teachers around it and what I think is a good understanding of the district’s efforts on Common Core,” she said. “What they identified to focus on—academic vocabulary—is clearly one part of the heart of Common Core. The way they are doing it is based on inquiry data, which is part of Common Core.” She added that the effort seems to be well integrated with the new teaching standards.

Teachers had regularly scheduled meetings and met informally on their own time. They learned about Positive Deviance, the idea that in every community there are people whose practices lead to better outcomes than those of peers with the same challenges and the same resources. They learned about Liberating Structures, a collection of interactive processes that enhance discovery and learning as group members define and solve problems. They explored goals, barriers, attitudes and differences. They examined the fine details of teaching and learning, and shared individual practices they used to enliven interest and curiosity among students. They considered the data they’d need to

test effectiveness of any new practices. Still, despite sustained effort, emergence of a clear sense of direction took months.

By late March 2014, the STEP teams at both schools decided to focus on teaching practices involving academic vocabulary. The Common Core State Standards define *academic vocabulary* as a set of words used in the dialogue and texts of different disciplines that often aren't part of children's daily conversations. The idea is that familiarity with such words will help students understand content in specific domains, and ultimately in all subjects. Working with Plexus and district facilitators Samuels and Fiala, the teachers used Liberating Structure exercises to nominate dozens of words they thought students should know, then narrow the list to ten for school-wide use. Words chosen by the Franklin teachers were *analyze, critique, evaluate, justify, describe, interpret, significance, evidence, purpose* and *consequence*.

"Picking those ten words was like the STEP process itself," Fitzgerald observed, reflecting how smoothly mutual agreement was reached on the word list. "Together we felt these are the best, and most meaningful."

Initially, Fitzgerald had wondered how he'd use these words in his music classes. But then he reflected on a class he had taken for teaching second language learners and the four domains of language he'd studied: reading, listening, speaking and writing. Music students read notes, listen, and speak through their instruments and write music using the rules of Western musical notation. But they don't usually write using the English language. Fitzgerald's assignment was one of several new uses of language in classrooms. Elizabeth Duty, who teaches English, history and health at Franklin, said she enjoyed the new challenge of incorporating academic vocabulary into all three of her subjects and felt that connections with her students grew in the process.

Judy Moses, who teaches advanced students at Lindbergh, recalled team colleagues using a Liberating Structure when they were "stuck" trying to define their focus. "When we needed to talk to each other, rather than at each other, we used Troika to identify our sticky issue," she said. Using Troika, pairs of people ask help and get advice from each other, then switch roles and do the same thing again. Then all review emergent suggestions. The exercise can move groups from stalemate to consensus. As Dr. Cohn explains, Troika helped team members identify academic vocabulary as a bridge between their own classroom goals and experiences and their relation to Common Core.

"I think repeated use of Liberating Structures in every STEP team meeting as they were getting started was critical in helping develop the sense of

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STEP facilitator Ed Samuels leads the program at the June, 2014 STEP retreat.

community that exists,” Dr. Cohn observed. “It helped break down segmentation into grade and department cliques, and got people to realize there are interesting people here who know things I’m interested in hearing about, and I want to spend time with them.”

At the end of June, the STEP teams, their facilitators, school principals, and representatives from the Gates Foundation, Plexus and the American Institute for Research (AIR), which has been documenting the work and collecting data, gathered at a retreat to review accomplishments, propose refinements, and plan for the future. STEP will begin in four additional LBUSD schools in September, and a new phase of the work will begin at Franklin and Lindbergh as teachers seek specific elements of their craft that kindle their own learning and that of their students.

“It was phenomenal to be uncomfortable, and to believe in the purpose of all of this.”

Getting Started: Through Turbulence to Hope

Several teachers observed that the STEP process initially had been difficult, turbulent and sometimes chaotic. “This was definitely a growing process because we are used to being told what to do,” said Elizabeth Duty. Others agreed teachers are accustomed to being presented programs and pacing charts with adherence expected. They thought this project seemed

vague. Even as the teams coalesced around uses of vocabulary, some questioned that focus.

“The struggle was that no one was sure what we were doing,” said Roshann Williams, PhD, assistant principal of Franklin. “We are used to following instructions. There were different conceptions of the plan. The struggle together generated our success. The turning point was the discussion about academic vocabulary

“Life would have been more difficult if STEP had not come along,” Williams added. “I was in a rut. STEP provided the struggle, the basis for success.”

Lindbergh Principal Connie Magee agrees academic vocabulary was a good start. Team members at Lindbergh developed a rubric to measure student growth with the new words. “I’m excited about where the group is now, and how well they have defined what they’re looking at and sharing,” Magee said. “The words are a great way to get the whole school excited. The students were using academic vocabulary before STEP, but this adds a layer of rigor, drilling down on a Common Core shift we implemented last year.”

James Hopper, an 18-year veteran teacher of math at Franklin, said, “This has been one of the harder years because everything that has been in place for the last ten years is not necessarily material.” He said students now have to explain their work in writing, and that’s where academic vocabulary comes in. He also notes that teachers learn from seeing their students learn.



Music teacher Andrew Fitzgerald sees parallels between new learning techniques and Everett Rogers’ “Diffusion of Innovation” construct.



Plexus Coach Mark Munger and Lindbergh Principal Connie Magee confer on lessons learned.

Ingrid Fuelleman-Ramos, a 6th grade math teacher at Lindbergh, was pleased teachers themselves chose the direction to take. “We’re not now intimidated by the wide open nature of the project. We have choices, options. It’s spectacular,” she said, adding, “STEP is the cherry on top.”

Williams lauded teacher engagement. “We stepped outside of our comfort zone. It was phenomenal to be able to be uncomfortable and believe in the purpose of all this. Franklin teachers took the time to persevere and make the unknown become known.”

The Schools

Lindbergh serves 700 students, of whom 63 percent are Hispanic and 22 percent are black. At Franklin Classical Middle School, about 75 percent of the 957 students are Hispanic and about 15 percent are black. Many children at both schools are English Language learners, and nearly all are eligible for free or reduced price lunch. Many of the students live in foster care.

Reflecting on the urgent needs of inner city children, Fuelleman-Ramos observed, “We have to be even better. STEP can turn Lindbergh into the school it could be.”

Lindbergh Principal Magee stands outside the school building every morning and tries to personally greet as many students as she can. “We serve a very needy population,” she said. “The work of STEP affects every student. Teachers will exchange ideas and they will reach every child.” Her hopes and standards are high. Lindbergh is becoming a Science, Technology Engineering and Math academy, using a nationally recognized K—12 science and engineering curricula. Two teachers will have intensive training. “I’d like to see those teachers in STEP,” she said.

Collaboration, Community and Shared Wisdom

Teachers had never before collaborated across disciplines and grade levels. Teachers of 6th, 7th and 8th grade science, math, English, history, health, physical education and music exchanged ideas on successful teaching and learning practices in their own content areas and the potential for cross-disciplinary insight. Enthusiasm and frustration grew in tandem in the early months. As one teacher put it, “I hate this and I love it.” Teachers decided to observe each other as they taught, and used Liberating Structures to decide how observations would work and what teachers would try to learn. They talked about how they might gather data on teacher behavior, student response, and data in general—what they would need, and how it could be collected. And instead of being presented with externally generated data, they were participating in selection of data they thought would help them.

Several teachers in STEP said collaboration let them help each other with new standards. Fuelleman-Ramos noted that while relationships among STEP team members were initially shaky, “the whole team feels supportive now.” She said she now meets regularly with Judy Moses, with whom she shares some students, to discuss teaching practices both have found successful. “It really helps to have a partner,” she said.

Gloria Blackburn, a former elementary school teacher now at Franklin, said, “The STEP process has opened my eyes...and created a spot for me to really connect with other teachers. If I’m stuck teaching some vocabulary, I have some help.” She has compared notes with teachers of several subjects at both schools. “I’m starting to use STEP principles with my students,” she added. “I invite students to come up with rules for the class. This organic approach has been very valuable to me as a relatively new teacher.” She also shared a practice she had used in elementary teaching. She called it “sentence lifting”—the process of using material written by a student as a basis for examination and learning by other students.

Blackburn sees changed behavior and new practices as a powerful combination. “There never would have been a time that teachers would ever have dreamed of developing, creating, collaborating, with teachers from another school,” she declared. She is eager to know what impact APD can have beyond her own school.



Teachers Pensha Vaughn, Judy Moses, Ingrid Fuelleman-Ramos and DeVonne Ballew, members of the Lindbergh STEP Team, describe their work together.

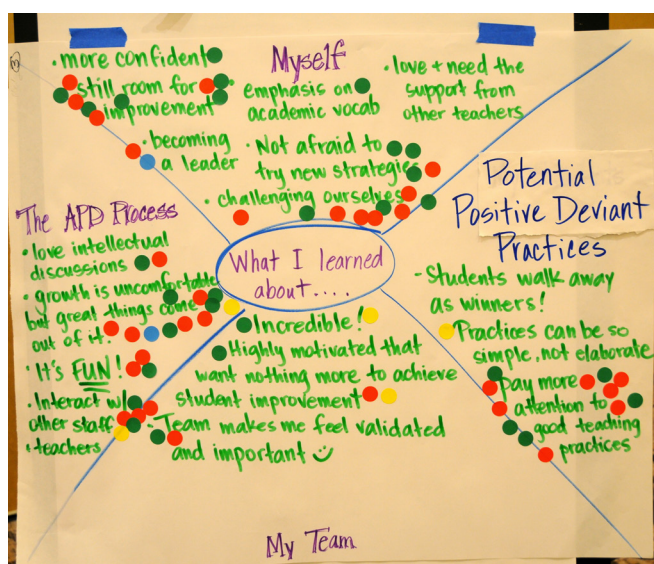
Marnelle Leonard, a 6th grade math teacher, struck up a friendship with an 8th grade math teacher, who teaches both remedial math and algebra. “She said some of her kids were having problems with improper fractions, and how to convert them into mixed numbers,” Leonard said. “She used the analogy of a bucket—this bucket holds only five cups, but this bucket holds eight cups. So how many cups are going to spill out of the bucket (when you pour its contents into the smaller one)? I got some buckets for my classes to have visual and hands on experience to aid understanding. We’ve gone back and forth on lots of things. It takes a village.

“Every time the STEP teams get together I get something out of it,” Leonard said. “Collaboration results in things I can take to my classroom. We collaborated across content and grade levels, and we’re all stronger for it. We try new strategies we learned from each other. We built trust and had excellent help from Ed and Tracy. When it comes to teaching and diverse practices, sharing can only be a good thing. And it will be priceless to be able to have solid data to represent growth. People take seriously what they evaluate. You want to know what works.”

“We’re all becoming leaders. This is something we didn’t expect coming in.”

Pensa Vaughn, who teaches 7th and 8th grade math at Lindbergh, joined STEP because Ed Samuels invited her and because she liked the idea of teachers finding practices that help each other. She appreciated the chance to learn what other teachers do. She had always talked to math and science teachers, but she is now talking to teachers in other fields. “Some of the things I learned confirmed what I was already doing, and some of the things were new to me,” she said. “A 6th grade teacher I observed has her kids stand when they answer questions. Some kids are shy and don’t want to be heard. This teacher didn’t have to keep reminding them to speak up, and her kids seemed OK with it. I started having my kids stand answering questions and I think it helps them.”

DeVonne Ballew said she is constantly changing teaching strategies to deal with unexpected situations in her Guidance Opportunity Class, a challenging class of 6th through 8th graders who have been in trouble. She considers classroom isolation a systemic flaw in education.



“Collaboration affects the practice of teaching. It can take the burden off an individual teacher to come up with all the ideas we need. I keep trying until I find what works for an individual kid. I ask other teachers what they’d do, but it’s often trial and error,” she said. “We need to be familiar with every aspect of what and how we teach. That’s why I love this process.”

She remembers one incident when information from an unexpected source—an APD principle—enabled her to help a troubled student. The boy had been kicked out of four middle schools before getting to her class, and he was very angry. When she told the students to open to 3.2 in their texts, he began cursing loudly. She asked him to step out of the room and

The team’s insights were systemic, connecting to the process, the team, the new practices, and even the self.

the security guard went with him. “The officer came back into the room and told me ‘the boy doesn’t understand what you were saying.’” The boy hadn’t realized she meant chapter 3 lesson 2. “You can’t make even the smallest assumptions,” Ballew said. “But you do need to pay attention to people who can bring diverse perspectives to your work.”

Leadership

Pamela Seki has seen several teachers quietly but confidently assume leadership roles in the STEP work. “I want teachers to be teacher leaders, and not feel that going into administration is the only way to lead,” Seki said. She praised Samuels and Fiala for the new leadership skills each has developed. She said Samuels, the former math teacher, is very outcome focused, and has facilitated deftly and encouraged teacher participation. “Tracy came to us from a kindergarten classroom. It’s hard, I know from personal experience, to leave the classroom and come into a central office setting...She has just blossomed as a leader,” Seki said, adding that STEP has awakened Fiala’s sense of being able to make contributions beyond a single classroom. She has encouraged Fiala’s goals, and adds Fiala may work toward a doctorate when she finishes her master’s degree.

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The principals of both schools hoped the project would develop leadership skills.

Connie Magee, who had been a principal at another school for nine years before coming to Lindbergh three years ago, reflected on her own leadership role with STEP. She aimed for hands-off support and gave them space—figuratively and literally. Realizing the team needed a place to meet, collaborate, and keep materials, she cleared an under-used classroom. “We’re excited about having that space, where we can share what’s going on,” she said. “It’s open to teachers at any time, and they have used it a lot. It’s a physical commitment we have made to collaboration.” Magee expects it will be used even more when the team meets with department heads.

“My first lesson was to shut up and listen,” she said with a laugh. “Letting go of control is still a battle I have with myself. I’ve invited more people to be on the team, and I hope I am successful in engaging them to be listening to other voices. My hope has been for the team to have me as a fly on the wall. Occasionally I’ll share, but I don’t want to change things. I want them to develop what they do.”

Roshann Williams also initially saw STEP as a capac-



Plexus Institute President Jeff Cohn and Franklin Assistant Principal Roshann Williams share a moment of enthusiasm.

ity building opportunity for teachers. She envisioned her role as supporting and encouraging growth of an informal teacher network. She attended most meetings. She said little, but occasionally offered stark observations. Once, urging participants to embrace challenge and avoid resting on past laurels, she told them “what made us great in the past will not make us great in the future.” She values the teachers’ creative energy and perseverance. She has a doctorate in educational leadership and said if she were writing her dissertation now, “I’d be all over this. This is some big stuff that can be valuable to the district and beyond our district.”

Lindbergh teacher DeVonne Ballew remarked, “We’re all becoming leaders, and this is something we didn’t expect coming in. Any teacher can learn to be a leader because of the processes we’ve been through. Whether you want to be out front or behind the scenes, you can be effective.”

Measurement and Data

Ali Korkmaz, the district’s Strategic Data Project Fellow, has attended most STEP meetings. He helps develop the surveys and measurements that will help find positive deviant practices, and that will help identify strengths and weaknesses within the district.

His work involves examining and interpreting existing data and collecting new data. While no specific positive deviant teaching or learning practices have been identified yet, Korkmaz says both schools in STEP have strong performers in each content area, so such discovery is likely. He has seen teachers grow in sharing practices, strategies and questions. “It’s a cultural understanding, and they have developed a new way of doing things together,” Korkmaz said, adding that social network mapping will document increased teacher collaboration.

Korkmaz has also seen attitudes about data change. Teachers used to look at overall school success, and attribute it to principals and the district. Now, he said, they are looking at very specific actions and practices that impact learning. They’re asking what they need to change. They are looking at how their former students are doing in high school. “You need macro and micro data to see patterns,” he said, “but for practices you need a micro bite-sized focus, and the teachers have initiated that.”

After only a few weeks, selected groups of children exposed to the new academic vocabulary work showed a slight rise in test scores. Teachers were cautiously optimistic, and excited about prospects of having a full year of data next June.

Autonomy and Bumper Cars

Describing guidance offered by external coaches, principals and facilitators, Franklin history teacher Tom Cordova said, “It was like bumper cars. They kept us on track but were not too intensely involved. And the project is open to anyone.” Teachers are planning events and strategies to bring more teachers into STEP.

Teachers feel they own the STEP processes and want to discover practices that relate to successes that data can support. As they expand next year’s focus beyond academic vocabulary, some want exploration of new classroom management methods. Whatever the choice, teachers now know processes that will help them reach consensus.

“My first step was to shut up and listen. Letting go of control is a battle I still have with myself.”

The chance to make a difference in the lives of children drives most teachers. Marnelle Leonard, who has taught for 22 years, remembers finding math difficult as a student. She empathizes with kids who struggle and wants to help them see math as a puzzle with many possible routes to solution. “I’ve had students come back a decade later and say that I helped them. That’s what gets you out of bed in the morning,” she said. “It fills your cup. Teaching is a passion for me. It’s what I am. There is nothing else I’d rather do.”

Music teacher Andrew Fitzgerald, who made a colorful booklet about STEP collaboration at Franklin, enjoyed discovering the creativity of his peers. “STEP is the opportunity to talk to adults,” he mused. It also encourages change. Thinking about academic vocabulary and music moved him to learn more theory and incorporate it in his classes. For his year-end assignment he asked students to choose a note and use it as a tonic to create a major and minor scale. Then they were to use notes from the scales to create two melodies, which they were to analyze so they could create the correct base line harmony. Fitzgerald asked them to write about each step in the process and document the skills they used. He was pleased with how well they did. Fitzgerald is pursuing a masters’ in educational technology, which he finds useful in music. As a musician who plays clarinet and several other instruments, he likes improvising and looks forward to next year’s discoveries. His course work has also led him to explore Everett Rogers’ theory of diffusion of innovation, which he considers important in education.

Dr. Cohn observes that the Gates Foundation has historically invested in initiatives with potential for scaling and spreading, and partner organizations working on STEP have the opportunity to create a model that could be used in any of the nation’s 15,000 school districts. “We’ve got inklings of practices starting to emerge that may be more effective than usual, and the desire to discover them,” Dr Cohn said. “But we still have the hard work of finding, either through discovering or creating, practices that are different and better, and confirming that with data.” This is the work yet to unfold in the next phase of STEP in Franklin and Lindbergh Middle Schools.

