

## SPECIAL ISSUE

### Preparing Teachers: Highly Qualified to Do What?

education policy analysis  
archives

A peer-reviewed, independent,  
open access, multilingual journal



epaa | aape

Arizona State University

Volume 21 Number 55

July 1<sup>st</sup>, 2013

ISSN 1068-2341

## Classroom, the *We* Space: Developing Student-Centered Practices for Second Language Learner (SLL) Students

*Fernando Rodriguez-Valls*

California Department of Education

*Gregorio A. Ponce*

San Diego State University

United States

**Citation:** Rodriguez-Valls, F., & Ponce, G. (2013). Classroom, the *we* space: Developing student-centered practices for second language learner (sll) students. *Education Policy Analysis Archives*, 21(55). Retrieved [date], from <http://epaa.asu.edu/ojs/article/view/1204>. This article is part of EPAA/AAPE's Special Issue on *Preparing Teachers: Highly Qualified to Do What?*, Guest Co-Edited by Pia Lindquist Wong and Elaine Chin.

**Abstract:** Developing teaching practices that meet the needs of Second Language Learners (SLL) calls for models of apprenticeship in which teacher candidates acquire competency on how to create learning spaces where students discover, experience and construct knowledge rather than solely practicing skills. The aforesaid argument has an implication when defining the competency of highly qualified teachers as framed by the No Child Left Behind (NCLB) Act. This article presents a three-step teacher development process requiring teacher candidates first to observe and analyze exemplary teaching practices. Secondly, to help them build expertise on how to question students to ignite their inquiry. And, thirdly, to develop and implement their practices to create a classroom as the *we* space. The outcomes of this model suggest that highly qualified teachers could be better prepared to work with SLL when they are competent in creating inclusive, participatory learning environments, in which students are able to utilize,

Journal website: <http://epaa.asu.edu/ojs/>

Facebook: /EPAAA

Twitter: @epaa\_aape

Manuscript received: 8/8/2012

Revisions received: 3/28/2013

Accepted: 3/29/2013

experiment, synthesize and evaluate knowledge.

**Keywords:** questioning; teaching practices; observing; inclusive education; apprenticeship.

### **El aula, nuestro espacio: Desarrollo de practicas educativas enfocadas en los alumnos y su aprendizaje de una segunda lengua**

**Resumen:** Desarrollar practicas de enseñanza que cumplan con las necesidades educativas de los estudiantes que están aprendiendo una segunda lengua requiere unos modelos de preparación y aprendizaje para candidatos a docentes en los cuáles éstos adquieran competencia en cómo crear espacios didácticos donde los estudiantes descubren, exploran, y construyen conocimientos en lugar de solo estar practicando destrezas. Este argumento es de extrema importancia cuando se define la idea de maestros altamente preparados definida por el acta “Que Ningún Nino se Quede Atrás” (NCLB). Este artículo presenta un programa de desarrollo de maestros que incluye tres niveles: primero los candidatos observan prácticas ejemplares, segundo desarrollan capacidad en como preguntar y modelar prácticas de cuestionamiento entre los estudiantes; y, tercero, construyen e implementan sus propias prácticas para crear una clase bajo el lema “este es *Nuestro* espacio.” Los resultados de este estudio sugieren que para optimizar y asegurar que los maestros estén altamente preparados para trabajar con estudiantes que están aprendiendo una segunda lengua, los maestros deben demostrar habilidades y conocimiento para crear espacios de inclusión y participación en el aprendizaje en los cuales los estudiantes puedan utilizar, experimentar, sintetizar y evaluar lo que están aprendiendo.

**Palabras-clave:** interrogaciones; prácticas de enseñanza; observaciones; educación inclusiva; aprendizaje.

### **A sala de aula, o nosso espaço: Desenvolvimento de práticas educativas focalizadas nos alunos e sua aprendizagem de uma segunda língua**

**Resumo:** Desenvolver práticas pedagógicas que atendam às necessidades educacionais dos alunos que estão aprendendo uma segunda língua requer preparação e modelos de aprendizagem para candidatos a professores em que se tornar proficientes na criação de espaços de aprendizagem onde os alunos possam descobrir, explorar, e construir o conhecimento ao invés de apenas estar praticando habilidades. Este argumento é extremamente importante na definição da idéia de professores altamente qualificados, conforme definido pela Lei “No Child Left Behind” (NCLB). Este artigo apresenta um programa de formação de professores, que inclui três níveis: primeiro os candidatos observam práticas exemplares, segundo desenvolvem a capacidade de como perguntar e exemplificar práticas de interrogações entre os alunos, e em terceiro lugar, construir e implementar suas próprias práticas para criar uma classe sob a ideia "este é o nosso espaço." os resultados deste estudo sugerem que, para otimizar e garantir que os professores são altamente treinados para lidar com alunos que estão aprendendo uma segunda língua, os professores devem demonstrar habilidades e conhecimentos para criar espaços inclusivos e de participação na aprendizagem em que os alunos podem usar, experimentar, sintetizar e avaliar o que eles estão aprendendo.

**Palavras-chave:** interrogações,; práticas de ensino; observações; aprendizagem; educação inclusiva.

## **Introduction**

Defining public education in California in the last ten years includes accountability, standard-based lesson plans, and research-based practices. In principle, these factors delineate effective, comprehensive teaching practices. Yet oftentimes they become the foundation of highly scripted

instructional programs that rely on Explicit Direct Instruction (EDI), a model based on a teacher-centered, direct instruction philosophy. Scripted programs include highly structured teaching delivery methods in which the teacher explicitly explains every step of each lesson and the student follows those directions. Even though these models have produced some success in increasing student achievement (Goeke, 2008; Hollingsworth & Ybarra, 2008; Marchand-Martella, Slocum & Martella, 2003), in other cases these same models have been insufficient to meet the needs of a full range of students such as Second Language Learners attending public schools in California (Linsky & Heifetz, 2002; McIver et al., 2010; Orozco, Orozco, & Todorova, 2010).

According to Tomlinson (1999), Olsen & Romero (2006), Tomlinson & McTighe (2006), Gándara (2010) and García & Kleifgen (2010), SLL students learn best when they are engaged as active participants in the learning process, not merely passive and inactive vessels to be filled with content that is neither meaningful nor valuable to their lives and experiences. Moreover, Boaler (2009) in her research of instructional techniques, portrayed these teacher-centered methods as follows, “in many . . . classrooms across America the same ritual unfolds: teachers stand at the front of the class demonstrating methods . . . then students work through sets of near-identical questions, practicing the methods. Students in such classroom learn that thought is not required” (p. 40). The implications of implementing these types of programs are that they encourage passive learning from all students and in particular from SLL students.

The duality and at times antagonism between these two methodologies generates a sequence of important questions when attempting to define the idea itself of a highly qualified teacher and the manner in which Teacher Credential Programs prepare highly qualified teachers. Specifically, (a) What are the main traits that define a highly qualified teacher?, (b) Does the level of competency on teacher-centered classrooms delineate highly qualified teaching?, (c) Does the mastery of student-centered practices characterize a highly qualified teacher?, and (d) What is required from Teaching Credential Programs to prepare highly qualified teachers to work with Second Language Learners?

The idea of highly qualified teachers was constructed under the No Child Left Behind (NCLB) Act (2001). NCLB defined a highly qualified teacher as one with full certification, a bachelor’s degree and demonstrated competence in subject knowledge and teaching. We note that an unclear definition of competence is what is driving the current debate when trying to reach an agreement on who should receive the seal of a highly qualified teacher.

To provide evidence on this issue of competence, with the idea that SLL students need to *experience* learning rather than *receiving* learning from the teacher, an Associate Professor of Mathematics Education and an Associate Professor of Biliteracy Education working at a Teacher Credential Program in a university located in Southern California created an apprenticeship model. The program had a twofold goal. First, to analyze if a student-centered methodology could be an effective method for the SLL students enrolled in public schools in a county where all the thirteen school districts implemented EDI/teacher-centered models. Second to shed light on the basic premise of competence of highly qualified teacher as it applies to both credentialed teachers and teacher candidates. Keep in mind that, when developing the model, the two professors thoroughly reviewed the challenges encompassed when installing student-centered methodology as the guideline for teaching and learning practices.

Transitioning classroom environments from the use of passive to active student learning models, whether one is a student, parent, teacher, or administrator, is neither a new issue nor an easy task. Points of resistance can be “as simple as inertia and an unwillingness to change. Others are rooted in norms, values, and incentives that govern modern education. And still others reflect assorted myths and misconceptions that bedevil active learning . . .” (Garvin, 1991, p. 6). To facilitate this transition the two professors created a space through a Migrant Education Summer Academy for five teacher

candidates to experience the aforesaid apprenticeship model. Though the focus of the apprenticeship model was teaching practices in Mathematics and Language Arts, teacher candidates had the opportunity to experience first-hand this apprenticeship model to learn and teach not only in Mathematics and Language Arts, but also in three other components, (a) the Portable Assisted Study Sequence (PASS) component, (b) the California High-School Exit Exam (CAHSEE) component, and (c) the Arts component; all of which as a unit provided a multidisciplinary curricula experience. The teacher candidates worked cooperatively with the two professors and with six credentialed teachers, three in the Mathematics and three in English Language Arts.

The apprenticeship model was organized around three areas: observations, questions, and practices. First, teacher candidates observed experienced teachers implementing practices that have their student as their epicenter. Lieberman & Friedrich (2010) and Berry et al. (2011), in their studies of teacher development, conveyed that providing opportunities for teacher candidates to observe exemplary practices is a fundamental tool for future teachers. Secondly teacher candidates learned how to guide their questioning by actively listening to SLL students. Sloan (2008), reflecting on the connection between questioning and listening when teaching, explained that “to become a better listener [helps teachers] to seek out and ask questions that will help students find their own answers” (p. 9). And thirdly, teacher candidates created, utilized and analyzed their own student-centered practices. According to Loughran (2006), this last step helps teacher candidates “develop their understanding of the teaching practices they experience in order to purposefully link the manner in which they learn in a given situation with the nature of teaching itself” (p. 4).

The next four sections present the structure of the Summer Academy with a brief description of the main features of the multidisciplinary curricula, describe the participants, explain the methodology utilized to gather evidence on teacher candidates’ perceptions and analysis of this apprenticeship model, and provide an in-depth description on how the three stages of the model were utilized in the Mathematics and Language Arts components of the academy.

### **Migrant Education Summer Academy**

A large number of migrant students enrolled in high schools in the area where this project took place are Second Language Learners. A majority of these migrant students are exposed to teacher-centered, lectured based practices in which the teacher controls the discourse within the classroom giving students scarce opportunities to experience and meaningfully acquire knowledge of academic language and knowledge of specialized subject matter (Krashen & Lee Brown, 2007). Centering the classroom discourse on the teacher’s voice rather than on the students’ voice frames teaching and learning with an *I plus They* pedagogy. Alternatively, if teaching and learning begins by understanding the students’ background experiences and prioritizes their voice, then the classroom becomes a *We* space. The latter approach was key when creating the four-week summer academy for sophomore high school SLL migrant students. Figure 1 below lists the components of the academy and the subject matter addressed within each component.

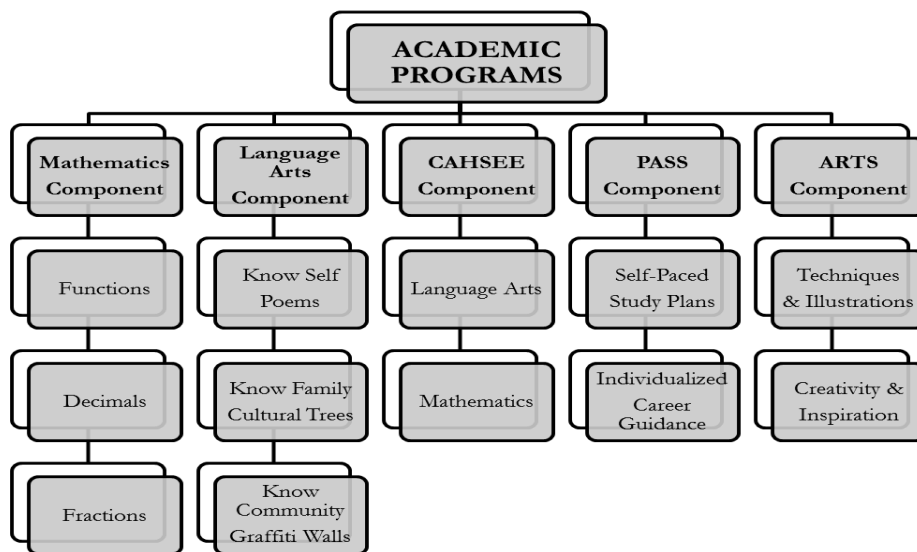


Figure 1. Organizational chart of the migrant education summer academy

The Mathematics Component focuses on developing conceptual understandings about functions, decimals, and fractions. Mathematics learning begins with the use of manipulatives to represent key ideas, then transitions to the use of visual representations, and concludes through the use of symbolic representations. Classes are organized into three sections, with students receiving instruction for three hours each day for five days; then the group of students rotates to another section for another five-day cycle, and does so once more for the third section.

The Language Arts Component focuses on Critical Literacy. Using the written text as a starting point, students read and respond to those texts and later convey their personal thoughts and reflections about them through the use of self-portrait poems, graffiti walls, short stories, and family cultural trees. This component of the program works closely with the Arts Component to help students make personal and meaningful connections from their work in both components. Students are organized into three groups and have the same teacher throughout the whole program.

The Portable Assisted Study Sequence (PASS) Component focuses on providing standard high school curriculum through the use of technology. This is an individualized and self-paced component guided by study plans created between the student and their respective high school counselor.

The California High School Exit Examination (CAHSEE) Component focuses on helping students who have already attempted the exam and have not succeeded yet in passing the exam. Students receive support in both Language Arts and Mathematics as it relates specifically to the content covered in these sections of the CAHSEE.

The Arts Component focuses on helping student discover, or rediscover, their creativity and being able to express that creativity in various forms. Working under the guidance of a world-renowned painter and author, which we will name Secundino<sup>1</sup>, students learn various techniques and models to convey ideas, thoughts, and emotions through the use of traditional and modern art

<sup>1</sup> All people's names in this article are pseudonyms

venues. The delivery model employs lectures and demonstrations to establish the required theoretical frameworks needed by students, and then employs a hands-on approach where students put such theories into practice by having them create their own works of art.

The multidisciplinary program concentrates on the use of non-traditional, interactive, student-centered strategies and tasks to help high school students overcome their fears, frustrations, and anxieties about mathematics and language arts, and to help them succeed with standardized exams such as the CAHSEE. The intent is to facilitate the creation of intellectual bridges within students through the use of concrete, hands-on learning experiences to “help build clearer mental images, thereby leading to greater understanding of abstract ideas” (Weiss, 2006, p. 239).

In order to support the professional development of both teacher candidates and credentialed teachers, the academy is organized to sustain their collaborative efforts so they can explore how to best meet the educational needs of their students. Being able to work in teams is an essential trait when defining highly qualified teachers (Beninghof, 2012). According to Villa, Thousand, and Nevin (2008), schools where teachers effectively collaborate within and across grade levels produce high quality education. Within the academy, each credentialed teacher has one or two teacher candidates present in the classroom; debriefing meetings are held each day to improve the lessons taught that day and to plan for the next day; and the pace of the lessons is adjusted according to the learning needs of the students. These modifications are consistent with recommendations by Henry, Bastian, and Fortner (2011) to help “speed up the development process” (p. 278) of beginning teachers through the use of “high-quality mentoring, networking, and intensive collaboration between teachers” (p. 278). Moreover, this supportive environment provides teachers and teacher candidates the flexibility to explore how to implement non-traditional, student-centered teaching strategies and learning tasks. This independence to adjust to the learning needs of students is also an important characteristic of highly qualified teachers that needs to be experienced by teacher candidates (Christenbury, 2011).

The final point to make is that teacher candidates are rotated throughout the academy between all the credentialed teachers to broaden their experience after a designated amount of time. That is, teacher candidates learn from and with each credentialed teacher. On a typical day, teacher candidates (a) arrive 30 minutes before the start of class to help with final preparations for the lesson of the day, (b) support instructional activities for the whole period, and (c) meet with the team of credentialed teachers to debrief the lesson and prepare for the next day. Their experience is organized around three key themes as explained below after the methodology section. We remind the reader that the focus will be in the mathematics and language arts components of the academy and that names have also been changed to maintain anonymity.

## **Methodology**

Five teacher candidates participated in this project. Two of them were working on their Special Education Teaching Credential and the other three were completing their K-8 Multiple Subject Teaching Credential. These candidates were selected based on their commitment, knowledge and performance demonstrated in the Mathematics, Literacy, and Social Studies methods courses taught by the two professors who designed the apprenticeship model. After the Summer Academy concluded, the two Special Education teacher candidates were hired in a local elementary school, two of the Multiple Subject candidates started and successfully completed their semester of Student Teaching practices, and the third Multiple Subject candidate took one more semester to complete two courses needed to enter Student Teaching; the student successfully completed student teaching the following semester.

Key components to understand the apprenticeship model are the comments and suggestions teacher candidates shared during and after the Migrant Education Summer Academy. The two professors created three venues to listen to what the teacher candidates had to say about their experience. Evidence, e.g. teacher candidate comments, was gathered at three different levels. One was from daily debriefings taking place after the teaching sessions throughout the academy. Another was from a survey that teachers and teacher candidates completed during the last week of the academy. The third one came from a group interview with all the teacher candidates scheduled five months after the Summer Academy ended. This continuum of teacher candidates' input (during, at the end, and after) helped us analyze how their perceptions progressed as their awareness, reflection and knowledge of student-centered methodologies increased.

The daily debriefings generated meaningful dialogues between the two professors, the teachers, and the teacher candidates. These debriefings occurred after each teaching session; in the morning session for Mathematics and in the afternoon session for Language Arts. The goal was to analyze daily practices and to cooperatively modify, adapt and tailor future practices. At this level, teacher candidates shared and reflected on what they had observed and/or what they had implemented while team-teaching or when teaching on their own. The teachers and the professors for the respective subject area provided feedback on both elements. The professors documented teacher candidates' comments after the debriefing concluded.

The second venue for teacher candidates' input was a survey designed by one of the professors in charge of the academy. In this survey teacher candidates anonymously responded to a six-question open-ended questionnaire as shown in Table 1. At this level teacher candidates were asked to reflect on essential components of this apprenticeship model.

Table 1.  
*Open Ended Survey*

<b>THEME</b>	<b>QUESTION</b>
<i>Teaching Practices</i>	How has your participation in the academy influenced your views, preparation, and/or practices about the teaching process? Explain.
<i>Content Area</i>	Has your participation in the academy influenced your understanding and/or preparation about mathematics, language arts or both? Please explain, making sure to clarify which subject or subject areas you are addressing in your response.
<i>Leadership</i>	Has your preparation in the academy provided you with leadership experiences to help you apply these ideas and/or models in other educational settings?
<i>Differentiated Instruction</i>	Has this academy addressed the educational needs of your students?
<i>Building Capacity</i>	What changes are needed to improve the academy?
<i>Cooperative Learning</i>	Share other thoughts you have about this academy that are important to you for us to know.

The last venue used to collect evidence took place during a group interview between the two professors and the five teacher candidates participating in this project. Questions asked in this interview were a follow-up to the main themes described on table-1. Teacher candidates shared their individual input on those themes as well as adding to remarks shared by their peers. The goal of this a posteriori analysis was to compare the input they provided in the debriefings and electronic survey and their thoughts after they had had the opportunity to observe, implement, and evaluate, either in their own classrooms when completing their student teaching experience or when substituting for other teachers. Their responses were recorded by one of the professors. The comments shared by the teacher candidates in these three settings (debriefings survey and interviews) are used in the next sections to contextualize, refine and examine the effectiveness of the apprenticeship model.

### **Observations: The One Doing Most of the Work is the One Doing Most of the Learning**

One of the features that define a highly qualified teacher is having the capacity to observe and analyze what other teachers do in their classrooms. When educating highly qualified teachers, they need the opportunity to actively observe and experience teaching directly. The apprenticeship model provided the space for teacher candidates to analyze different styles when implementing student-centered methodologies. As one of the teacher candidates shared, “the Academy allowed us to work with different teachers who use different teaching techniques; therefore I was able to learn different methods of engaging students and classroom management skills.”

The challenge in conducting observations lies in bringing focus to the myriad of activities and interactions that occur within a classroom. Teacher candidates utilized three lenses to observe how a student-centered environment is established at the onset and maintained through the academy. That is, teacher candidates observed (a) the process to change a classroom’s culture from passive to active learning, (b) the use of questions to influence the dialogue that occurs between and among teachers and students, and (c) the progression of teaching strategies and learning tasks to facilitate student understanding. Given that “the norms [culture] established in the classroom have strong effects on students’ achievement” (National Research Council [NRC], 2000, p. 25), teacher candidates began by observing how academy teachers worked to create classroom cultures “that value the search for understanding and allow students (and teachers) the freedom to make mistakes in order to learn” (p. 145).

This is a fundamental shift for most SLL students and takes about three days of supporting them through this transition because they either resist participating as active learners or interpret their participation to mean they can do or say whatever they want. Teachers consistently invite, support, and encourage students to become part of the class conversations while at the same time asking students, when necessary, to rephrase their statements or change their behavior so mutual respect is upheld as ideas are exchanged and debated. This is an important skill to learn noted a teacher candidate because it is a “challenge to monitor student learning in collaborative environments” and also, shared another teacher candidate, because it becomes very clear, very fast, that “students are ready to share if someone will listen.”

At the debriefing meeting teachers and teacher candidates had at the end of the first day, the conversation focused on the manner in which classroom management was maintained as students face the challenge of viewing and accepting a different role in the classroom; that is, from being passive learners to becoming active learners. Eventually this conversation converged on the use of questions as a key trait of the classroom’s culture to enable the exploration of concepts by both teachers and students. Thereafter, teacher candidates began to develop, with the teachers, questions



that can be used to generate whole class discussions, bring focus to group discussions, and scaffold individual student thinking, all of which are aimed to bring insights to every student in the classroom. Interestingly, teacher candidates noted how students begin to adopt this classroom culture as they themselves start to answer student questions with questions or, upon asking their own question, try to anticipate what question will be asked of them. The use of questions was pivotal not only to helping students become active learners but also to help teachers understand student thinking; we expand upon this in the next section.

More importantly, by observing the progression of the teaching strategies and learning tasks, teacher candidates begin to realize that “children who merely sit on the sidelines while the teacher acts as the sole player in the education process will not learn at the level that would have been possible had they participated” (Tileston, 2000, p. 5). This realization is a fundamental challenge to the underlying assumption held by most teacher candidates that SLL students learn best through the use of a teacher-centered instructional model. Representative of the experience for teacher candidates, one of them noted, “this experience will influence my future teaching because I really believe in the importance of guiding students to thinking beyond rather than simple direct teaching.” The key to support this shift in assumptions lies in the conversations that occur at the end of each day when teachers and teacher candidates meet to debrief the lesson of the day and plan the lesson for the next day. After all, shared a teacher candidate, “being able to debrief either before or after the class session has been very helpful to see what worked and what didn’t work in the lesson. By observing teachers that are familiar with the material and being able to ask them questions right then and there is very helpful.”

This conversation begins by exploring how the learning tasks supported, or hindered, the work of the students and how the teaching strategies supported, or hindered, their work. The discussion can focus on the struggles SLL students had with the content or about themselves with an eye towards making, as needed, adaptations to the sequence of the tasks, the level of the questions, the dynamics between and among the teachers and students, and the effects of the strategies. The discussion can focus as well on the insights students had with the content or from teacher candidates themselves, trying to clearly understand what prompted the insight by analyzing carefully what happened right before, during, and after the insight. Loreta, a teacher candidate, shares positively how she “learned teamwork with the debriefing sessions and how to accept criticism and feedback.” Finally, a key topic discussed at each debriefing is the *progression of learning tasks* for language arts and mathematics, which we discuss separately in the next two paragraphs.

Within language arts, teachers carefully share with the teacher candidates how reading, writing, and listening help SLL students learn about their lives and experiences while learning a second language. The activities aim to help students realize how these linguistic competencies become conduits for reflection and self-expression. As the academy moves forward, teacher candidates see the sequence of tasks shifting from self to family by helping students discover, or rediscover, their cultural roots and how they, as individuals, form part of their family cultural tree. Then, once SLL students discover their voices, they begin to explore how they form part of a greater community and the many other voices that exist within their community. Corroborating the latter, Renata, a teacher candidate, underscored the importance of switching from a pedagogy of transmission to a pedagogy of collaboration when teaching and learning, stating that in a student-centered classroom the teacher “uses questions and pictures; uses students’ prior experiences to connect with lost students; uses kinesthetic devices to learn; and seeks to understand their thinking.” Being able to construct a pedagogy of collaboration is fundamental when answering the first question in the third paragraph of the introduction (What are the main traits that define a highly qualified teacher?). A highly

qualified teacher is one who designs teaching and learning by echoing the students' voices; thus, the classroom becomes the *We* space.

Within mathematics, conversations between teachers and teacher candidates center upon giving practical meaning to the overarching message that student mathematical understanding is richer and deeper when teaching strategies and learning tasks move from the concrete to the abstract. Each day lessons are dissected to establish in specific ways how SLL students explored mathematical concepts kinesthetically, visually, linguistically, or numerically. Renata shared her realization as a teacher that there is “no need to just lecture, lecture, lecture; one needs to be a facilitator too that listens to the students.” Lessons on any given day are compared and contrasted to lessons from the previous day or days to help teacher candidates see how the types of tasks students complete in class are changing throughout the academy. Teacher candidates soon realize that a progression occurs within a lesson and between lessons; a key insight they need as get ready to teach the students themselves in the practicum component of their experience. Another main trait of a highly qualified teacher, then, is to design lessons with careful attention to how the learning tasks progress from one to the other so SLL students can explore the ideas in a meaningful manner.

### **Questioning: Understanding Student Thinking to Nurture Student Thinking**

Mastering questioning is the second feature that defines a highly qualified teacher. As Wilen (1987) explained, “the types of questions that elementary and secondary teachers ask and the techniques and strategies they employ can make the difference between reflective, active learners and parroting, passive learners” (p. 9). Specifically, questioning in a teacher-centered methodology is a tool mainly used by the teacher to examine if students have mastered the *content* being taught primarily through the use of factual recall questions “where students engage in frequent exercises of rote memory” (Cunningham, 1987, p. 71). However, in a student-centered learning sequence, questioning is not only a tool, but also a skill that both students and teachers need to master to gain deeper understanding of the content explored throughout the lesson (Rohstein & Santana, 2011). Two challenges appear when teachers utilize a student-centered methodology. The first is that teachers need to “know how to attend and to respond with deep understanding to the students they teach” (Schultz, 2002, p. 2). The second is that teachers have to learn how to utilize the knowledge students bring to the learning situation. To overcome these challenges, the apprenticeship model carefully prepared teacher candidates to identify “common patterns in student thinking in specific subject matter . . . by framing and delivering questions precisely and purposefully and eliciting and interpreting displays of student understanding” (Ball & Forzani, 2011) because, as Violeta noted “class discussions give insights to what students know” (p. 43).

The process to prepare candidates on how to master the art of questioning was built around two ideas, (a) the *content* of the questions asked by the teachers and (b) the *style* in which teachers asked them to ignite SLL students' engagement and participation during the lesson. The former referred to the inclusion of academic language and content area vocabulary when asking a question, keeping in mind that it is not sufficient for teachers to ask good questions. The latter was defined as the tone, the voice and the body language teachers utilize when asking a question and is important because “the questions teachers ask and the ways that students respond (or choose not to) are a large part of the communication system that operates in the social and cultural context of the classroom” (Clegg, 1987, p. 18). “The question also must elicit a good response from students” (Gall & Rhody, 1987, p. 33). Both elements were equally important when constructing a student-centered classroom as the *We* space for Second Language Learners (SLL).

According to Noguera (2003), well-designed questioning provides SLL with two important cognitive thresholds, critical thinking and linguistic competency, which are essential to guarantee the students' equal access to high-caliber education. In particular, teacher candidates learned that "information seeking questions—the 'who, what, when, where' variety—establish a common information base for subsequent analysis...[while]...Analytical questions, of the 'why' and 'how' type, can challenge students to think deeply and look for causes" (Austin, Sweet, & Overholt, 1991, p. 223). Throughout the four weeks, teacher candidates were able to observe, produce and experience the effectiveness of well-designed questions. This experience is best encapsulated by this teacher candidate's reflection, "through the academy I learned that guiding students through questioning and personal connections is rather effective to help students think critically, beyond the surface level."

An example of content-based and efficient questioning task was the Cultural Collages project in the Language Arts component that SLL students completed during the second week of the summer academy. In this project, students assembled pictures they took with disposable cameras to portray their cultural identities. Throughout the week, teacher candidates had the opportunity to observe how teachers utilized high-order thinking skills questions, e.g. analysis and evaluation, to create deep understanding of the central theme of the lesson focused on cultural identity. Within this lesson, teachers first modeled how to use questions such as: What is the underlying theme of your Cultural Collage? (Analysis) Do you think that being...is a good or a bad thing? (Evaluation) Or can you compare your Cultural Collage with that presented by...? (Analysis) to later facilitate the use of these questions when SLL students designed, discussed and presented their Cultural Collages. Teachers candidates observed in this lesson that teachers used questioning in multiple ways. Questioning might initially be used as a tool to actively involve SLL students in the lesson. Then teachers bridged to using questioning as the skill that enables students to hear different interpretations from their peers and from their teachers, as well as to foster SLL students' deep understanding in the information analyzed throughout the lesson (Finkel, 2000).

The use of questions is also a primary tool used to improve the skills of teacher candidates to understand how students think when doing mathematics. Too often "the mathematics we have tried to teach in school often has been disconnected from the ways that children think about and solve problems in their daily lives...[not only that, but]...children do not always think about mathematics in the same ways as adults. If we want to give children the opportunity to build from within, we need to understand how children think about mathematics" (Carpenter, Fennema, Franke, Levi, Empson, 1999, p. xiv). In the mathematics component of the academy, prior to teaching a mathematics lesson, teachers work with teacher candidates, to create, integrate, and embed questions in the lesson plans with different end-goals in mind. One type of question focuses on bringing out into the open some of the misconceptions students have about mathematical concepts or ideas, e.g. "How is  $1/2$  different from  $1/3$ ?" For many students,  $1/2$  is smaller than  $1/3$  because 2 is smaller than 3. Another type of question intends to tap into students' prior knowledge about mathematical ideas they will need to use throughout the lesson, e.g. "Where is the tens place in a given number? What about the tenths place?" In this case, the discussion leads to establishing how to write five-tenths or  $5/10$  as a decimal. Other types of questions are meant to elicit deeper thinking by students after they share an idea with the class, e.g. "If five-tenths ( $5/10$ ) is equivalent to one-half ( $1/2$ ), how does this help us write  $1/2$  as a decimal?" Here, teacher candidates begin to learn how to answer questions with questions to nurture students' thinking about mathematics.

When talking with the teacher candidates on the importance of questioning as the foundation for creating a classroom as the *we space*, Marieta, one of the teacher candidates commented, that, "good questions help teachers to relate teaching with students' experiences as well as to tap into

students' prior knowledge." Along with this thought, Quetzal, another teacher candidate, underlined the importance of well-planned questioning: "it is important to know the hierarchy of high-order thinking questions. This helps you to focus on the question rather than on the answer. Questions help redirect teaching instead of re-teaching." And finally, Naya stated, "Now I can see that students are always ready to share if there is someone who listens. Students want to explain their thinking, not just the answer. You do not have to be scripted when asking questions. You can adapt your questions to reach the students."

Listening to all these comments, it was evident that teacher candidates valued the opportunity to analyze the nature and application of questioning. Modeling, analyzing and implementing questioning is an essential component when educating highly qualified teachers because it prepares teachers to listen before, during and after teaching; thus they can use questions that will provoke more questions as well as to push SLL students to find their own answers and their own educational voice (Bartolomé & Leystina, 2008).

### **Practice: From My Classroom to Our Classroom, the We Classroom Space**

Practice is the culminating step in the process to become a highly qualified teacher. Exemplary practices are built on both external and internal accountability. The latter is based on self-evaluation processes highly qualified teachers conduct on their own practices. The former comes from peripheral parameters around teaching, i.e., principal's evaluations, Academic Performance Index (API), and Academic Yearly Progress (AYP). The last stage in this apprenticeship model focuses on the idea of creating teaching and learning practices that make students accountable for their own learning and the knowledge others acquire through the learning tasks. When designing these practices, teacher candidates referred to observation and questioning to construct the *We* classroom as an inclusive and responsive learning environment. Bielaczyc & Collins (1999) highlighted centrality, peripherality and identity as three key factors to ensure that the classroom becomes the *We* space. Centrality and peripherality imply that at some point during the learning tasks, some students may have a more central role than others. Identity in the *We* classroom is a twofold concept because (a) it represents the unique and distinct knowledge each student produces and acquires and (b) it is the collective educational gain all the participants build and share at the end of the learning process. For example, during a language arts lesson at the summer academy some students guided (centrality) the writing process when others contribute (peripherality) with their notes. In this scenario Loreta, one of the experienced teachers, emphasized to all her students that though they had different tasks all of them were expected to show their individual work (individual identity) and to produce the same level of competency in the activity's learning outcomes (shared identity). As Roseta, a teacher candidate said, "different roles in this activity created personal challenges to enrich what others were learning."

The concept of additive learning processes was displayed on the Graffiti Walls assignment; the last assignment students completed within the Language Arts component. This project equally underpins the three aforesaid key elements when creating the classroom as the *We* space. The teacher candidates' role in this activity is peripheral throughout the whole activity. Candidates first dialogued with the whole group to visualize how individual pieces, cultural tags, could intertwine with each other to create a communal piece. Conducting observations and questioning prior to implementing practices is crucial when implementing this lesson. Being peripheral, assisting students, and providing the necessary scaffolding without monopolizing the learning process, requires fine classroom management skills. Teacher candidates have acquired these skills through observations and the multiple feedbacks that were provided to them throughout the first two stages.

Marieta, explained that “at the beginning I was not sure about myself because teaching is really complex. I thought I needed to be the center of everything. Now I realize that my role as teacher is to simplify complexity, to silently teach.” This comment and others showed that the apprenticeship model helped teacher candidates to overcome their tendency to be the epicenter of the teaching processes.

The idea of communal learning is critical for Second Language Learners. Mantero (2007), in his studies of second language learners, underscored communal learning as “the essential element of many identities coming together” (p. 375) to overcome the challenges SLL students face when acquiring both the academic language and the content embedded in each activity. In this last stage of the apprenticeship model, teacher candidates take the first steps in learning how to maintain a communal learning environment with the help and direction of their respective teacher. Teacher candidates learn how to make explicit the specific academic language and content that is integrated, and usually implicit, within any given activity; hence, students learning experiences are meaningful and fun. After all, fun activities in a classroom are valuable if students gain insights about the content and are able to communicate those insights to improve their understandings, both individually and collectively. Thus, “if teaching is conceived as constructing a bridge between the subject matter and the student, learner-centered teachers keep a constant eye on both ends of the bridge” (NRC, 2000, p. 136) and teacher candidates quickly discover that *language* is the raw material used to construct such a bridge with their students.

Consistent with the recommendation given by Henry, Bastian, and Fortner (2011) who concluded in their study of beginning teachers that programs should “include classroom observations for all novice teachers by those with experience teaching the same grades and/or subjects, followed by feedback and coaching on ways to improve instruction, . . . and opportunities to share successful techniques and learn from others” (p. 278), teacher candidates have at least three opportunities to take the lead in their respective classrooms to put into practice and sustain a *We space* in a mathematics classroom. Typically, in their first opportunity, teacher candidates will ask individual students questions in a whole-class setting, often from across the room, to assess her/his understandings. In debriefing this first experience, teacher candidates are able to share what those specific students know or do not know about mathematics, but have a hard time sharing what the rest of the class knows. For this reason, in their second opportunity, teacher candidates will begin interacting more closely with students as they do group activities. Teacher candidates will also transition from asking individuals questions to asking group questions, with follow-up questions to individuals as needed. While teacher candidates have a much better sense of what individual students know from this second opportunity, the communal learning is still minimal. In debriefing, the conversation points to the fact that most of the discussion takes place between teacher and student, or teacher and a group of students. The goal for their third opportunity to take the lead is focused on having teacher candidates support teacher/student, teacher/group, student/student, and group/group interactions. To do this, teacher candidates begin to take comments or questions by students or groups and present them to the whole class to explore together; teacher candidates redirect student thinking to other students to explore; teacher candidates design activities to help students experience positive whole class dynamics that bring in the strengths of the individual to enhance the learning of the class. In debriefing this third and final experience, teacher candidates share their realization about how much more powerful the learning experience becomes for students and teachers when individual ideas become the foundation for collective insights. All teacher candidates concur with Renata’s thought that “allowing us to teach provides us with a meaningful experience because allowing us to take these ideas in the role of a teacher helps us think differently about what it means to be a teacher.”

## Conclusion

Unless teacher candidates have personally experienced or witnessed the amount of learning that takes place in classroom environments using mostly nontraditional teaching strategies and learning tasks, they are hard pressed to believe, let alone adopt, such models when they begin their teaching careers. Both professors in the Multiple Subjects, Single Subject, and Special Education credential programs, have observed the persistence of this hesitation in many teacher candidates as they complete their programs. Even after candidates have directly experienced themselves in methods courses how much better they understand the content of a subject (mathematics, language arts, etc.) as a result of learning with such teaching strategies and learning tasks, they hesitantly accept that the same would happen with their future K-12 SLL students. The key to minimize or remove this reluctance is to have teacher candidates see and use these same strategies and tasks with K-12 SLL students' right after their methods courses and prior to their student teaching experience. The Migrant Education Summer Academy is such a program because it "places more emphasis on guided practice in classroom settings from the beginning of training" of teacher candidates (Stewart, 2011, p. 18) by having them learn through classroom observations, questioning, and practices. After all, "in order for teachers to change their practices, they need opportunities to try things in their classrooms and then receive feedback" (NRC, 2000, p. 27) making sure to "select a few strategies to work on as opposed to working on an array of strategies all at once" (Marzano, 2011, p. 82).

Preparing highly qualified teachers to be ready to work with the linguistically diverse population we have today in California and nationwide, calls for models of apprenticeship where teacher candidates can build, shape and polish their practices even before completing their student-teaching experience. Teacher candidates must be exposed to an array of educational experiences in order to successfully construct multidimensional lesson plans, which provide a full range of students with various opportunities first to learn the content and the academic language embedded in this content; and secondly to demonstrate competency in the two aforesaid areas. We emphasize that the responsibility for creating these opportunities relies on a communal effort from different Local Educational Agencies (LEA).

The model proposed in this article shows the commitment of two local agencies, the Teaching Credential Program and the Migrant Education Program, to prepare highly qualified teachers and to enhance the educational experiences of local students helped to shorten the achievement gap among a population at risk, Second Language Learner migrant students. Moreover, by including teacher candidates, the Summer Academy created an educational work force that not only will have an impact beyond the scope of the Summer Migrant Program but also will increase the social, cultural and linguistic capital in the area where this project was implemented.

In conclusion, to effectively educate the new generation of highly qualified teachers who can engage Second Language Learners in additive schooling practices, teacher candidates have to go beyond lecture-based models which work under the assumption that one method works for all students. Stakeholders and educational agencies must support and promote models that foster inclusive and participatory learning environments in which teacher candidates sequentially (observing, questioning, practicing) experiment with different methodologies and students are able to utilize, research, synthesize and evaluate knowledge.

## References

- Austin, J., Sweet, A., & Overholt, C. (1991). To see ourselves as others see us: The rewards of classroom observation. In W. W. Wilen (Ed.), *Questions, questioning techniques, and effective teaching* (pp. 215-229). Washington D. C.: National Education Association.
- Bartolomé, L. I. & Leytina, P. (2008). Naming and interrogating our English-Only legacy. In J. B. Entin (Auth.) R. C. Rosen & L. Vogt (Auth. & Eds.) & J. Entin (Ed.), *Controversies in the classroom: A radical teacher reader* (pp. 97-112). New York, NY: Teachers College Press.
- Beninghof, A. M. (2012). *Co-teaching that works: Structures and strategies for maximizing student learning*. Indianapolis, IN: Jossey-Bass.
- Berry B. & Teachersolutions 2030 Team. (2011). *Teaching 2030: What we must do for our students and our public schools—Now and in the future*. New York, NY: Teachers College Press.
- Ball, D. L. & Forzani, F. M. (2011). Teaching skillful teaching. *Educational Leadership*, 68(4), 40-45.
- Bolaer, J. (2009). *What's math got to do with it?: Helping children learn to love their least favorite subject--and why it's important for America*. New York, NY: Viking Adult.
- Bielaczyc, K. & Collins, A. (1999). Learning communities in classrooms: A reconceptualization of education practice. In C. M. Reigeluth (Ed.), *Instructional design theories and models, Vol. II* (pp. 1-21). Mahwah, NJ: Lawrence Erlbaum Associates.
- Carpenter, T. P., Fennema, E., Franke, M. L., Levi, L., & Empson, S. B. (1999). *Children's mathematics: Cognitively guided instruction*. Portsmouth, NH: Heinemann.
- Christenbury, L. (2011). The flexible teacher. *Educational Leadership*, 68(4), 46-50.
- Clegg, A. A. (1987). Why questions? In W. W. Wilen (Ed.) *Questions, questioning techniques, and effective teaching* (pp. 11-22). Washington D. C.: National Education Association.
- Covey, S. (1998). *The 7 habits of highly effective teens*. New York, NY: Fireside.
- Cunningham, R. T. (1987). What kind of question is that? In W. W. Wilen (Ed.), *Questions, questioning techniques, and effective teaching* (pp. 67-94). Washington D. C.: National Education Association.
- Espino Calderon, M. (2007). *Teaching reading to English language learners, Grades 6-12: A framework for improving achievement in the content areas*. Thousand Oaks, CA: Corwin Press.
- Finkel, D. L. (2000). *Teaching with the mouth shut*. Portsmouth, NH: Boynton/Cook Publishers, Inc.
- Gándara, P. (2010). *Forbidden language: English learners and restrictive language policies*. New York, NY: Teachers College Press.
- Garcia, O. & Kleifgen, J. A. (2010). *Educating emergent bilingual: Policies, programs and practices for English Language Learners*. New York, NY: Teachers College Press.
- Garvin, D. A. (1991). Barriers and gateways to learning. In Christensen, C. R., Garvine, D. A., and Sweet, A. (Eds.), *Education for judgment: The artistry of discussion leadership* (pp. 3-13). Boston, MA: Harvard Business School Press.
- Goeke, J. L. (2008). *Explicit instruction: Strategies for meaningful direct teaching*. Upper Saddle River, NJ: Allyn & Bacon.
- Krashen, S. & Lee Brown, C. (2007). What is academic language proficiency? *Singapore Tertiary English Teachers Society*.
- Henry, G. T., Bastian, K. C., and Fortner, C. K. (2011). Stayers and leavers: Early-career teacher effectiveness and attrition. *Educational Researcher*, 40(6), 271-280.
- Hollingsworth, J. R. & Ybarra, S. E. (2008). *Explicit Direct Instruction (EDI): The power of the well-crafted, well-taught lesson*. Thousand Oaks, CA: Corwin Press.

- Lieberman, A. & Friedrich, L. D. (2010). *How teachers become leaders: Learning from practice and research*. New York, NY: Teachers College Press.
- Linsky, M. & Heifetz, R. A. (2002). *Leadership on the line: Staying alive through the dangers of leading*. Boston, MA: Harvard Business Press.
- Loughran, J. (2006). *Developing a pedagogy of teacher education: Understanding teaching & learning about teaching*. New York, NY: Routledge.
- Mantero, M. (2007). Future perspectives and research on identity in educational context. In M. Mantero (Ed.), *Identity and second language learning: Culture, Inquiry, and dialogic activity in educational contexts* (pp. 373-378). Charlotte, NC: IAP.
- Martella, N. E., Slocum, T. A. & Martella, R. C. (2003). *Introduction to direct instruction*. Upper Saddle River, NJ: Allyn & Bacon.
- Marzano, R. J. (2011). Art and science of teaching: What teachers gain from deliberate practice. *Educational Leadership*, 68(4), 82-85.
- Mc Iver, D. J., Ruby, A., Balfanz, R. W., Jones, L., Sion, F., Garriott, M. & Byrnes, V. (2010). The talent development middle grades model: A design for improving early adolescents' developmental trajectories in high-poverty schools. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling and human development* (pp. 446-462). New York, NY: Routledge.
- National Research Council. (2000). *How people learn: Brain, mind, experience, and school*. National Academy Press: Washington, D.C.
- Noguera, P. (2003). *City schools and the American dream: Reclaiming the promise of public education*. New York, NY: Teachers College Press.
- Olsen, L. & Romero, A. (2006). *Knowing our English learners, Unit 1: Secondary school leadership for English learner success*. Oakland, CA: California Tomorrow and Los Angeles County Office of Education.
- Schultz, K. (2003). *Listening: A framework for teaching across difference*. New York, NY: Teachers College Press.
- Sloan, B. (2008). Learning to listen to students. *Inquiry* (11)1, 5-10.
- Súarez-Orozco, C., Suárez-Orozco, M., & Todorova, I. (2010). *Learning a new land: Immigrant students in American society*. Cambridge, MA: Belknap Press of Harvard University.
- Stewar, V. (2011). Raising teacher quality around the world. *Educational Leadership*, 68(4), 16-20.
- Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Tomlinson, C. A. & McTighe, J. (2006). *Integrating differentiated instruction & understanding by design: Connecting content and kids*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Topping, D. H. & McManus, R. A. (2002). *Real reading, Real writing: Content-area strategies*. Portsmouth, NH: Heinemann.
- Villa, R. A., Thousand, J. S., & Nevin, A. I. (2008). *A guide to co-teaching: Practical tips for facilitating student learning*. Bloomington, IN: Corwin Press.
- Weiss, D. M. (2006). Keeping it real: The rationale for using manipulatives in the middle grades. *Mathematics Teaching in the Middle School*, 11(5), 238-242.
- Wilens, W. W. (1987). *Questions, questioning techniques, and effective teaching*. Washington D. C.: National Education Association.



## About the Authors

Dr. Fernando Rodriguez-Valls  
Migrant Education Program State Administrator  
English Learner Support Division  
California Department of Education  
1430 N Street  
Sacramento, CA 95814  
Email: [ferespanya@gmail.com](mailto:ferespanya@gmail.com)

Fernando Rodriguez-Valls research interests focus on Critical Literacy. He explores with teachers and students how using the written text as a starting point, students can read and respond to those texts to later convey their personal thoughts and reflections about those readings through the use of self-portrait poems, graffiti walls, short stories, and family cultural trees.

Dr. Gregorio A. Ponce  
San Diego State University, IV Campus  
720 Heber Avenue  
Calexico, CA 92231  
Email: [gponce@mail.sdsu.edu](mailto:gponce@mail.sdsu.edu)

Gregorio Ponce is an associate professor and chair for the Division of Education. His research interests include the development of professional development activities that help K-12 teachers use non-traditional, interactive, student-centered strategies and tasks to help their students overcome their fears, frustrations, and anxieties about mathematics.

## About the Guest Co-Editors

**Pia Lindquist Wong**  
California State University, Sacramento  
Email: [wongp@csus.edu](mailto:wongp@csus.edu)

Pia Lindquist Wong, Ph.D., is a Professor in the Chair of the Department of Teaching Credentials at California State University, Sacramento (CSUS). Her research focuses on urban professional development schools, teacher practices in the context of urban school reform and democratic education, and comparative and international education. She teaches courses on critical pedagogy, multicultural and bilingual education, and educational research. From 2000 until 2008, she was the Project Director for the Equity Network, an urban school reform and teacher preparation partnership that included 12 professional development schools, 5 districts, 2 teachers' associations and Sacramento Area Congregations Together and was supported in part by grants from the U.S. Department of Education and the California Post-Secondary Education Commission. She is a member of the Committee on Accreditation for the CA Commission on Teacher Credentialing and currently serves as co-chair of the Teacher Advisory Panel, convened by the CTC. Dr. Wong has collaborated with Brazilian scholars on school reform in Brazil and has served as a consultant to the

Secretariats of Education in the states of Minas Gerais and Paraná. She co-edited (with Ronald Glass) *Prioritizing urban children, their teachers, and schools through professional development schools* (2009), co-authored *Education and Democracy: Paulo Freire, Education Reform and Social Movements* (1998) with Maria Pilar O'Cadiz and Carlos Alberto Torres, and published other articles in journals such as *Comparative Education Review*, *Teacher Education Quarterly*, and *Journal of Educational Policy*. Dr. Wong received a B.A. with Honors in Latin American Studies and an M.A. in City Planning from the University of California, Berkeley, and a Ph.D. in International Development Education from Stanford University. She is married to Bruce Griesenbeck, a transportation planner, and they are the proud parents of Riley Hui (16 years) and Emily Ming (14 years).

### **Elaine Chin**

Dean, Lurie College of Education  
San Jose State University  
Email: [elaine.chin@sjsu.edu](mailto:elaine.chin@sjsu.edu)

Elaine Chin began her appointment as Dean of the Connie L. Lurie College of Education at San José State University on June 1, 2009. Prior to that, she was the Associate Dean of the Lurie College of Education from August 2007 to May 2009. She has held a number of administrative and faculty positions, including Department Chair and Associate Director of Teacher Education and in the College of Education at Cal Poly, San Luis Obispo and faculty in the School of Education at The University of Michigan, Ann Arbor. She is a former high school English and Journalism teacher. She has been active in research on alternative teacher certification programs, policies governing teacher licensure, socialization into the professions, and the development of professional expertise by novices in the fields of journalism, medicine, chemistry and K-12 teaching. Her publications include articles and book chapters in *Educational Researcher*, *Written Communication*, *The Journal of Learning Sciences* and *The International Handbook of Educational Policy*. She holds a Ph.D. in Education from Stanford University, an M.A.T. in English Education from The University of Chicago, and an A.B. with Honors in English from The University of Chicago.

**SPECIAL ISSUE****Preparing Teachers: Highly Qualified to Do What?**

## education policy analysis archives

Volume 21 Number 55

July 1<sup>st</sup>, 2013

ISSN 1068-2341



Readers are free to copy, display, and distribute this article, as long as the work is attributed to the author(s) and **Education Policy Analysis Archives**, it is distributed for non-commercial purposes only, and no alteration or transformation is made in the work. More details of this Creative Commons license are available at <http://creativecommons.org/licenses/by-nc-sa/3.0/>. All other uses must be approved by the author(s) or **EPAA**. **EPAA** is published by the Mary Lou Fulton Institute and Graduate School of Education at Arizona State University. Articles are indexed in CIRC (Clasificación Integrada de Revistas Científicas, Spain), DIALNET (Spain), [Directory of Open Access Journals](#), EBSCO Education Research Complete, ERIC, Education Full Text (H.W. Wilson), QUALIS A2 (Brazil), SCImago Journal Rank; SCOPUS, SOCOLAR (China).

Please contribute commentaries at <http://epaa.info/wordpress/> and send errata notes to Gustavo E. Fischman [fischman@asu.edu](mailto:fischman@asu.edu)

Join **EPAA's Facebook community** at <https://www.facebook.com/EPAAAAPE> and **Twitter feed** @epaa\_aape.

education policy analysis archives  
editorial board

Editor **Gustavo E. Fischman** (Arizona State University)

**Audrey Amrein-Beardsley** (Arizona State University) **Rick Mintrop**, (University of California, Berkeley)

**Jeanne M. Powers** (Arizona State University)

**Jessica Allen** University of Colorado, Boulder

**Gary Anderson** New York University

**Michael W. Apple** University of Wisconsin, Madison

**Angela Arzubiaga** Arizona State University

**David C. Berliner** Arizona State University

**Robert Bickel** Marshall University

**Henry Braun** Boston College

**Eric Camburn** University of Wisconsin, Madison

**Wendy C. Chi\*** University of Colorado, Boulder

**Casey Cobb** University of Connecticut

**Arnold Danzig** Arizona State University

**Antonia Darder** University of Illinois, Urbana-Champaign

**Linda Darling-Hammond** Stanford University

**Chad d'Entremont** Strategies for Children

**John Diamond** Harvard University

**Tara Donahue** Learning Point Associates

**Sherman Dorn** University of South Florida

**Christopher Joseph Frey** Bowling Green State University

**Melissa Lynn Freeman\*** Adams State College

**Amy Garrett Dikkers** University of Minnesota

**Gene V Glass** Arizona State University

**Ronald Glass** University of California, Santa Cruz

**Harvey Goldstein** Bristol University

**Jacob P. K. Gross** Indiana University

**Eric M. Haas** WestEd

**Kimberly Joy Howard\*** University of Southern California

**Aimee Howley** Ohio University

**Craig Howley** Ohio University

**Steve Klees** University of Maryland

**Jaekyung Lee** SUNY Buffalo

**Christopher Lubienski** University of Illinois, Urbana-Champaign

**Sarah Lubienski** University of Illinois, Urbana-Champaign

**Samuel R. Lucas** University of California, Berkeley

**Maria Martinez-Coslo** University of Texas, Arlington

**William Mathis** University of Colorado, Boulder

**Tristan McCowan** Institute of Education, London

**Heinrich Mintrop** University of California, Berkeley

**Michele S. Moses** University of Colorado, Boulder

**Julianne Moss** University of Melbourne

**Sharon Nichols** University of Texas, San Antonio

**Noga O'Connor** University of Iowa

**João Paraskveva** University of Massachusetts, Dartmouth

**Laurence Parker** University of Illinois, Urbana-Champaign

**Susan L. Robertson** Bristol University

**John Rogers** University of California, Los Angeles

**A. G. Rud** Purdue University

**Felicia C. Sanders** The Pennsylvania State University

**Janelle Scott** University of California, Berkeley

**Kimberly Scott** Arizona State University

**Dorothy Shipps** Baruch College/CUNY

**Maria Teresa Tatto** Michigan State University

**Larisa Warhol** University of Connecticut

**Cally Waite** Social Science Research Council

**John Weathers** University of Colorado, Colorado Springs

**Kevin Welner** University of Colorado, Boulder

**Ed Wiley** University of Colorado, Boulder

**Terrence G. Wiley** Arizona State University

**John Willinsky** Stanford University

**Kyo Yamashiro** University of California, Los Angeles

\* Members of the New Scholars Board

archivos analíticos de políticas educativas  
consejo editorial

Editor: **Gustavo E. Fischman** (Arizona State University)

Editores. Asociados **Alejandro Canales** (UNAM) y **Jesús Romero Morante** (Universidad de Cantabria)

- |   |  |
|---|--|
| <b>Armando Alcántara Santuario</b> Instituto de Investigaciones sobre la Universidad y la Educación, UNAM México          | <b>Fanni Muñoz</b> Pontificia Universidad Católica de Perú   |
| <b>Claudio Almonacid</b> Universidad Metropolitana de Ciencias de la Educación, Chile                                     | <b>Imanol Ordorika</b> Instituto de Investigaciones Económicas – UNAM, México                            |
| <b>Pilar Arnaiz Sánchez</b> Universidad de Murcia, España   | <b>Maria Cristina Parra Sandoval</b> Universidad de Zulia, Venezuela                                     |
| <b>Xavier Besalú Costa</b> Universitat de Girona, España  | <b>Miguel A. Pereyra</b> Universidad de Granada, España  |
| <b>Jose Joaquin Brunner</b> Universidad Diego Portales, Chile   | <b>Monica Pini</b> Universidad Nacional de San Martín, Argentina   |
| <b>Damián Canales Sánchez</b> Instituto Nacional para la Evaluación de la Educación, México                               | <b>Paula Razquin</b> UNESCO, Francia   |
| <b>Maria Caridad García</b> Universidad Católica del Norte, Chile   | <b>Ignacio Rivas Flores</b> Universidad de Málaga, España  |
| <b>Raimundo Cuesta Fernández</b> IES Fray Luis de León, España  | <b>Daniel Schugurensky</b> Arizona State University  |
| <b>Marco Antonio Delgado Fuentes</b> Universidad Iberoamericana, México   | <b>Orlando Pulido Chaves</b> Universidad Pedagógica Nacional, Colombia                                   |
| <b>Inés Dussel</b> FLACSO, Argentina  | <b>José Gregorio Rodríguez</b> Universidad Nacional de Colombia  |
| <b>Rafael Feito Alonso</b> Universidad Complutense de Madrid, España  | <b>Miriam Rodríguez Vargas</b> Universidad Autónoma de Tamaulipas, México                                |
| <b>Pedro Flores Crespo</b> Universidad Iberoamericana, México   | <b>Mario Rueda Beltrán</b> Instituto de Investigaciones sobre la Universidad y la Educación, UNAM México |
| <b>Verónica García Martínez</b> Universidad Juárez Autónoma de Tabasco, México  | <b>José Luis San Fabián Maroto</b> Universidad de Oviedo, España   |
| <b>Francisco F. García Pérez</b> Universidad de Sevilla, España   | <b>Yengny Marisol Silva Laya</b> Universidad Iberoamericana, México                                      |
| <b>Edna Luna Serrano</b> Universidad Autónoma de Baja California, México  | <b>Aida Terrón Bañuelos</b> Universidad de Oviedo, España  |
| <b>Alma Maldonado</b> Departamento de Investigaciones Educativas, Centro de Investigación y de Estudios Avanzados, México | <b>Jurjo Torres Santomé</b> Universidad de la Coruña, España   |
| <b>Alejandro Márquez Jiménez</b> Instituto de Investigaciones sobre la Universidad y la Educación, UNAM México            | <b>Antoni Verger Planells</b> University of Amsterdam, Holanda   |
| <b>José Felipe Martínez Fernández</b> University of California Los Angeles, USA   | <b>Mario Yapu</b> Universidad Para la Investigación Estratégica, Bolivia                                 |

arquivos analíticos de políticas educativas  
conselho editorial

Editor: **Gustavo E. Fischman** (Arizona State University)  
Editores Associados: **Rosa Maria Bueno Fisher** e **Luis A. Gandin**  
(Universidade Federal do Rio Grande do Sul)

**Dalila Andrade de Oliveira** Universidade Federal de Minas Gerais, Brasil  
**Paulo Carrano** Universidade Federal Fluminense, Brasil  
**Alicia Maria Catalano de Bonamino** Pontifícia Universidade Católica-Rio, Brasil  
**Fabiana de Amorim Marcello** Universidade Luterana do Brasil, Canoas, Brasil  
**Alexandre Fernandez Vaz** Universidade Federal de Santa Catarina, Brasil  
**Gaudêncio Frigotto** Universidade do Estado do Rio de Janeiro, Brasil  
**Alfredo M Gomes** Universidade Federal de Pernambuco, Brasil  
**Petronilha Beatriz Gonçalves e Silva** Universidade Federal de São Carlos, Brasil  
**Nadja Herman** Pontifícia Universidade Católica –Rio Grande do Sul, Brasil  
**José Machado Pais** Instituto de Ciências Sociais da Universidade de Lisboa, Portugal  
**Wenceslao Machado de Oliveira Jr.** Universidade Estadual de Campinas, Brasil

**Jefferson Mainardes** Universidade Estadual de Ponta Grossa, Brasil  
**Luciano Mendes de Faria Filho** Universidade Federal de Minas Gerais, Brasil  
**Lia Raquel Moreira Oliveira** Universidade do Minho, Portugal  
**Belmira Oliveira Bueno** Universidade de São Paulo, Brasil  
**Antônio Teodoro** Universidade Lusófona, Portugal  
**Pia L. Wong** California State University Sacramento, U.S.A  
**Sandra Regina Sales** Universidade Federal Rural do Rio de Janeiro, Brasil  
**Elba Siqueira Sá Barreto** [Fundação Carlos Chagas](#), Brasil  
**Manuela Terrasêca** Universidade do Porto, Portugal  
**Robert Verhine** Universidade Federal da Bahia, Brasil  
**Antônio A. S. Zuin** Universidade Federal de São Carlos, Brasil