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## The Observation Protocol for Academic Literacies: Conceptual Framework and Validation Report

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OPAL

# The Observation Protocol for Academic Literacies:

Conceptual Framework and Validation Report



**Magaly Lavadenz, Ph.D. | Elvira G. Armas, Ed.D.**

Center for Equity for English Learners - CEEL  
Loyola Marymount University





**Loyola Marymount University**  
**Center for Equity for**  
**English Learners**

The Center for Equity for English Learners enriches and supports the work of schools, school systems, educational/community partners, and policy makers through an assets-based approach. CEEL exists to serve the unique academic, social, and language needs of linguistically and culturally diverse students in California and throughout the nation. CEEL's staff provides consistent, high quality services, programs, resources, and professional development that promote equity and excellence for English Learners and advance multilingualism. We hold the following goals to support this mission:

- Develop research and policy tools related to the education of ELs.
- Provide research-based professional development for teachers and educational leaders to address the needs of ELs.
- Partner with individuals, organizations and institutions to engage the broader educational community.
- Develop and compile resources to support schools and educational institutions working with ELs.

Center for Equity for English Learners - Loyola Marymount University  
Los Angeles, California  
<http://soe.lmu.edu/ceel>

**CENTER FOR EQUITY FOR ENGLISH LEARNERS | CEEL**

Loyola Marymount University  
Los Angeles, California

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Differentiation is not a teaching formula, but rather a philosophy about the teaching-learning process that invites creativity and respects the diversity of individuals.

Strassman, 2005, p. 359

## **THE OBSERVATION PROTOCOL FOR ACADEMIC LITERACIES CONCEPTUAL FRAMEWORK**

### **INTRODUCTION**

English Language Learners (ELLs) are among the largest group of “underserved students” in the nation. Currently, there are over five million ELLs in the United States, representing an increase of 57% over the past ten years (Ballantyne, Sanderman, & Levy, 2008). The need to build teacher knowledge and expertise in addressing the specific needs of English Language Learners has never been more acutely important. Education policies, as defined in the No Child Left Behind Act of 2001, have led to standards based reforms and high-stakes testing that are compounded by the states’ varying interpretations of testing policies.

Despite the focus on test results for ELLs, study after study reveals great academic achievement gaps according to race, language, and socioeconomic difference. The National Assessment of Educational Progress report reveals significantly enduring and widening gaps between English-proficient students and ELLs, with only small percentage of eighth grade ELLs achieving proficient levels in reading (4%) and math (6%) (Rampey, Dion, & Donahue, 2009). Seventy one percent of ELLs scored below “basic” on eighth-grade NAEP reading and math tests (Batalova, Fix, & Murray, 2007); decreased graduation rates ensue (Center on Education Policy, 2005). Minority students also have higher suspension, grade retention dropout rates, lower GPAs, over-representation in special education programs, and fewer

enrollments in four-year colleges (Harvard Civil Rights Project, 2005; Ruiz-de-Velasco & Fix, 2000).

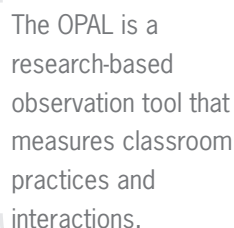
We are facing an instructional support gap, with limited opportunities for educators to receive focused observation feedback coupled with opportunities for comprehensive and sustained professional development to analyze, reflect, and improve on research-based practices for ELLs. These statistics support the critical need to develop and use effective behavioral observational instruments that address differentiated instruction around issues of language and learning.

The most common tools for data-gathering in classrooms are behavioral observation instruments/protocols; these allow for more reliable data when compared to teacher self-reports, interviews, questionnaires, and surveys (Pianta & Hamre, 2009; Matsumura, Patthey-Chavez, Valdes & Garnier, 2002; Hoge, 1985). There exist few “wide-lens” observation systems that map comprehensive assessments of linguistically/culturally diverse classrooms (Bruce, Lara-Alecio, Parker, Hasbrouck, Weaver, & Irby, 1997; Echevarria & Short, 2004; Hilberg, Waxman, & Tharp, 2004; Bailey, 2007). In response to this void in the field of behavioral observation instruments, an inter-disciplinary research team at Loyola Marymount University, Los Angeles conducted an instrument validation study for a newly developed classroom observation tool, the Observation Protocol for Academic Literacies (OPAL).

## OPAL DEVELOPMENT

The OPAL was developed in 2006 using a three-stage process to define and test the model.

The OPAL is a research-based behavioral observation tool that measures teacher practices and



The OPAL is a research-based observation tool that measures classroom practices and interactions.

classroom interactions from sociocultural and language acquisition perspectives. This observation protocol utilizes a six-point Likert-type scale (1-6, Low to High) to rate instruction for academic literacies, defined as a set of 21st century skills, abilities, and dispositions developed through the affirmation of and in response to students'

identities, experiences, and backgrounds.

The conceptualization and measurement of classroom instruction, interactions, and materials to inform the professional development of teachers of English Learners is of great importance to the academic success of this population. To this end, the OPAL is derived from research-based sociocultural and language acquisition theories. The use of the OPAL is intended to advance theory, research, and practice on classroom interactions between teachers and ethnically/linguistically diverse children and adolescents.

The purpose of this document is to explicate the conceptual framework from which the OPAL was developed; the underpinnings of the OPAL are grounded in research-based practices that bolster ELL's academic achievement. Moreover, research on effective teaching practices posits that quality teachers of ELLs ensure students' academic success and require quality professional development (Ballantyne, Sanderman, & Levy, 2008; Darling-Hammond & Bransford, 2005; Walqui, 2001; Villegas & Lucas, 2002).

Accordingly, Wong Fillmore and Snow (2000) posit that teachers of ELLs require knowledge, skills, and attitudes as: (a) communicator; (b) educator; (c) evaluator; (d) educated human being/seeker of knowledge; and (e) agent of socialization. The OPAL elaborates these concepts through a proactive positioning of the teacher as a knowledgeable professional.

As part of our work to develop and validate a classroom observation protocol that

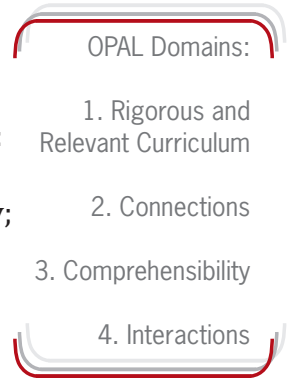
allows for teacher reflection and improvement of practice, we framed our measurement instrument, the OPAL, around four essential areas of practice:

1) Rigorous and Relevant Curriculum; 2) Connections; 3) Comprehensibility; 4) Interactions. First, we summarize current research on differentiation

for language, literacy, and content-area learning through socio-cultural

perspectives. Then, we define four essential features of differentiated instruction for ELLs.

Reflection questions are provided to guide the use of the OPAL as a measure of classroom instruction and tool for teacher professional development.



### **SOCIOCULTURAL PERSPECTIVES**

Teaching and learning English are complex processes not explained by language theories or methods alone. The relationship between language majority and minority groups, language status, immigration, economics, and language policies add complexity to language-learning (Skutnabb-Kangas, 2000; Cummins, 2000). Subtractive and additive bilingualism, which either eliminate (subtract) or augment (additive) students' home language, illustrates the complex relationship between first and second language development (Lucas & Beresford, 2010; Rumberger & Gandara, 2009). Sociocultural approaches counter negative/deficit orientations that highlight students' "deficiencies," as measured by standardized assessments



Effective instruction for ELLs is not only a matter of quality instruction...it also must address the micro-level contacts that ELLs have with others in schools.

(Abedi, 2008; Lucas & Beresford, 2010). Learning contexts, teachers' practices/opportunities to learn, and status variables are also taken into account (Garcia, Kleifgen, & Falchi, 2008; Santamaria, 2009).

## EFFECTIVE TEACHING PRACTICES FOR ENGLISH LANGUAGE LEARNERS

Research indicates that ELLs require access to comprehensible, rigorous, and relevant content instruction *and* opportunities to link content with prior knowledge through active classroom participation that maximizes engagement. We reframe the research on teacher expertise and effective instruction for ELLs through four essential areas of practice denoted on the OPAL: 1) rigorous and relevant curriculum; 2) connections with students' backgrounds, interests, and experiences; 3) comprehensible input; and 4) interactions between teachers and students, and between students and peers.

The academic success of ELLs depends largely on acquiring and using the academic language required for success in school. Schleppegrell and Colombi (2002) describe this as the discourse used in academic, professional, and technical contexts, characterized by its high level discipline-specific vocabulary and rhetorical styles. Tomlinson's seminal work on differentiated instruction (2001) stresses that individual students' learning needs are based on adaptations to what is taught (content), how it is taught (process), and evidence of student learning (products).

The OPAL allows educators to discuss, observe, and reflect on and address specific aspects of content area instruction with the types of interactions/tasks (processes) that can yield

maximum results for ELLs across language proficiency levels. The OPAL’s four domains are key components in teachers’ instructional practice and are essential to effectively support and differentiate instruction for ELLs. Each of the OPAL Domains is outlined below, coupled with teacher reflective questions to help guide conversations around effective teaching and learning for linguistically diverse students.

Academic language is the discourse used in academic, professional, and technical contexts, characterized by its high level discipline-specific vocabulary and rhetorical styles.

**OPAL DOMAIN #1: Implementing a Rigorous and Relevant Curriculum**

What is it?	Questions for Teacher Reflection
<p>A rigorous and relevant curriculum is cognitively complex, relevant, and challenging. It allows educators to value and capitalize on students’ linguistic and cultural backgrounds.</p>	<p><b>How do I...</b></p> <ul style="list-style-type: none"> <li>• Establish high expectations based on content <u>and</u> EL standards so that I address students’ linguistic and academic needs?</li> <li>• Present lessons and units of study to promote cross-curricular understanding based on cognitive <u>and</u> language proficiency levels?</li> <li>• Identify learning objectives that address language and content standards?</li> <li>• Ensure that I use curricular materials that represent cultural perspectives?</li> <li>• Provide access to materials <u>and</u> content in student’s primary language?</li> <li>• Provide opportunities for students to transfer what they know from their first language to English?</li> <li>• Engage students in problem solving and critical thinking?</li> </ul>

Language, **content**, and learning strategy objectives are components of effective ELL teaching practices (Brinton, Snow, & Wesche, 1989). Academic language development, alongside standards-based approaches with knowledge of students’ English-proficiency

levels, are used to differentiate instruction (Saunders & Goldenberg, 2010). Teachers need to maintain high expectations for student learning while organizing curriculum that builds

Teachers need to maintain high expectations for student learning while organizing curriculum that builds students' understanding of universal themes.

students' understanding of universal themes.

Expectations are established based on content and performance standards as well as knowledge of students' academic, developmental, and linguistic needs. In order for the content to be rigorous and relevant, teachers need to ensure that ELLs have access to appropriate

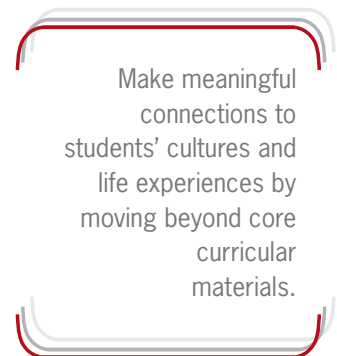
materials, beyond the core text. Teachers should advocate for adapted texts for beginning ELLs, which include versions in students' primary languages, access to bilingual dictionaries, and technology/multi-media to enhance/augment learning.

To differentiate instruction for ELLs, teachers should encourage students to actively transfer skills between their first language and English (Lucas & Beresford, 2010). This can be as simple as pointing out cognates in both languages to explicitly teach differences in the phonologies (sound systems) and/or grammatical differences between the first or second language. In order to do this, teachers need to have basic background knowledge of language features of the languages of their students. For example, knowing that there are no consonant blends in Vietnamese can help teachers address this feature in oral language or writing instruction.

## OPAL DOMAIN #2: Bridging Connections

What is it?	Questions for Teacher Reflection
Bridging connections with students' prior knowledge is the ability to link content to students' lives, histories, and realities in order to create change.	<p><i>How do I...</i></p> <ul style="list-style-type: none"><li>• Plan for opportunities to value and link students' personal experiences and previous learning to classroom instruction?</li><li>• Provide resources and activities that reflect students' cultural backgrounds and interests?</li><li>• Use strategies to pose questions and elicit students' thinking about their histories, communities, cultures, and languages?</li></ul>

Instruction that values and cultivates the educational and personal experiences ELLs bring to the classroom, rather than ignores or tries to replace these experiences, enables students to make meaningful **connections** with what is being taught and what they already know (Cummins, 1996). Making meaningful connections to students' cultures and life experiences by moving beyond core curricular materials that often do not reflect students' lives is another example of differentiating instruction. It also assists in creating opportunities for discussion and application of essential subject matter learning so that students can engage in and reflect on how this new learning is relevant to their context (Echevarria & Short, 2004; Bruner, 1978).



Additionally, ELLs benefit from teachers' explanations and modeling of strategies and processes for tackling complex instructional tasks (Chamot & O'Malley, 1994; Gersten & Baker, 2000). Think-aloud protocols are excellent examples of metacognitive strategies that encourage students to speak out loud what they are thinking. For ELLs, think alouds can occur

in their strongest language (for beginning ELLs this may be in their first language). These strategies are effective ways in which teachers can increase students’ ability to recall previously acquired knowledge and apply relevant concepts and/or skills to new learning.

**OPAL DOMAIN #3: Teaching for Maximum Comprehensibility**

What is it?	Questions for Teacher Reflection
<p>Comprehensibility is the attainment of maximum student understanding in order to provide access to content for all students.</p>	<p><b><i>How do I...</i></b></p> <ul style="list-style-type: none"> <li>• Include frequent checks for understanding within each lesson?</li> <li>• Informally assess students’ understanding during my lesson and adjust my lesson based on this assessment?</li> <li>• Plan for instruction that scaffolds the task by using visuals, graphic organizers, and demonstrations to clarify concepts?</li> <li>• Provide multiple opportunities for students to use and appropriate academic discourse?</li> <li>• Provide linguistically-appropriate instruction by questioning and identifying tasks appropriate to each student’s level of language proficiency?</li> <li>• Clarify and expand students’ oral and written output?</li> </ul>

These aspects of comprehensible instruction for ELLs provide access to a rigorous, standards-aligned curriculum through cycles of input, clarifications, and questioning, as well

Comprehensible instruction for ELLs provides access to a rigorous, standards-aligned curriculum through cycles of input, clarification, and questioning, as well as support for primary language

as support for primary language development. Additive approaches to learning content and language are essential characteristics of equitable and differentiated instruction for ELLs. In addition to using visuals, graphic organizers, and manipulatives, there are other practices to increase access to the content areas for ELLs across language proficiency levels. Teachers should identify key vocabulary

for content and language development. It is critical to provide multiple opportunities for students to use and internalize academic vocabulary as well as language structures. This maximizes comprehensibility during directed instruction and scaffolds comprehension during independent reading (Carlo, August, McLaughlin, Snow, Dressler, Lippman, Lively, & White, 2004; Brinton, Snow, & Wesche, 1989; Krashen, 1982). Students’ primary languages can be used to preview, or introduce, new concepts at the beginning of a unit or lesson. This increases ELLs’ comprehension of content presented during the lesson delivered in English. At the completion of a lesson or unit, a teacher-directed, or student-led, review of what was learned is conducted using the student’s primary language. This provides an excellent method of checking for comprehension and is referred to as the “preview-review” method (Ovando, Collier, & Combs, 2003). It is more effective than translating concepts or content during lesson delivery because it helps students become familiar with the content prior to the presentation of the lesson. Consequently, it allows students to concentrate on understanding the lesson and results in increased comprehensibility and language learning.

**OPAL DOMAIN #4: Multiple Opportunities for Interaction**

What is it?	Questions for Teacher Reflection
<p>Interactions are varied participation structures that facilitate access to the curriculum through maximum engagement and leadership opportunities.</p>	<p><b><i>How do I...</i></b></p> <ul style="list-style-type: none"> <li>• Assess students’ linguistic, academic and social abilities in order to create flexible groupings?</li> <li>• Modify classroom structures and procedures to include accountability as part of collaborative work?</li> <li>• Create classroom routines that promote student autonomy and build self-monitoring skills?</li> <li>• Model and provide time for students to participate in academic discourse across the content areas?</li> </ul>

Cooperative learning is a key instructional strategy for ELLs because it enhances interactions among students, promotes the development of positive academic and social support systems for ELLs, prepares students for increasingly interactive environments, and allows teachers to manage large classes of students with diverse needs (Holt, 1993). Flexible student grouping and collaborative routines engage students in talking about content in relevant, meaningful, and structured ways. These routines are scaffolds that promote student autonomy (Finocchiaro & Brumfit, 1983; Saunders & Goldenberg, 2010; Swain, 1986). From simple processes such as structured turn-taking, to individual roles/jobs or responsibilities in small group work, to varying partners with ‘bilingual buddies,’ students who actively participate in classroom discussions with others are more engaged in learning the content.

Bruner (1978), like Vygotsky, focuses on the social and cultural aspects of learning. He suggests that people understand better when there is personal significance in mind, not just through attention to “the facts.” Knowledge and memory are constructed through meaningful interactions with peers and adults in their environments. Learning must be a process of discovery where learners build their own knowledge, through conversations and dialogue with teachers and peers. Swain (1986) maintains that interactions are part of developing communicative competence in students—this means that students need to be able to talk, question, and use the discourse of various genres to gain competency in both English and the content area. Teachers guide interactions to provide opportunities for students to gain competency in English by explicitly modeling the type of language required for specific genres, and provide structures that allow students to practice these, orally and in writing.

## CONCLUSION

The development of the OPAL was guided by a conceptual framework that encapsulates essential elements of professional development and building teacher knowledge alongside effective practices for working with students whose first language is not English. This observational protocol focuses on much more than the implementation of a single lesson in a given content area. The OPAL purports to measure instructional practices that impact content and language development as well as classroom environment and interactions. Thus, we contend that the OPAL is a powerful tool for describing teacher capacity and informing systemic supports needed for educators working with ELLs.

Framing effective, differentiated instruction for English Language Learners in the context of complex social, political, and educational conditions is a challenging task. The four essential domains identified in this section are central to differentiating instruction for ELLs. Supporting the development of teachers' expertise with ELLs by using students' linguistic and cultural resources in differentiated ways will allow us to develop students' academic competencies in English, and ultimately, to ensure that we prepare all students for 21st century learning, emphasizing collaboration, critical thinking, problem solving, communication, creativity, and innovation.



# **THE OBSERVATION PROTOCOL FOR ACADEMIC LITERACIES**

## **ESTABLISHMENT OF VALIDITY AND RELIABILITY**

### **RESEARCH CONTEXT**

The Observation Protocol for Academic Literacies (OPAL) was developed in tandem with a large educational reform movement in California that focused on implementing a principles-based reform through a co-design process involving county, district, and schools with large percentages of ELLs. Observational data for the validation sample were collected from 15 sites involved in this reform effort and eight non-participating reform sites with proportionate numbers of ELLs.

### **DESIGN**

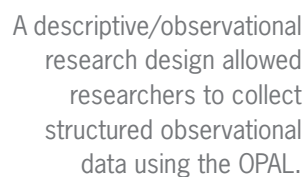
This validity study employed a descriptive/observational research design. Descriptive/observational research is used to gain an understanding of, or to give an explanation of a situation or event, an individual or a group of individuals. In descriptive/observational research, the researcher observes and records 'real life' settings as opposed to contrived artificial research situations (McMillan & Schumacher, 2006). This design allowed the researchers to collect structured observational data using the OPAL instrument to examine variables in classroom contexts that affect teaching and learning for ELLs. Validation analysis consisted of the use of Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) using AMOS 16.0 to determine the fit between the hypothesized model and the data observed. CFA examines the unidimensionality and reliability of the OPAL domains and indicators. Latent factor structures of the OPAL constructs/subscales based on individual indicators/items were examined.

## **OPAL: PHASES OF DEVELOPMENT**

In response to the need for observation instruments to measure effectiveness of ELL teacher practices, the OPAL was developed in 2006 using a three-phase process to define and test the model: Phase 1 – Content Validity; Phase 2 – Construct Validity and Phase 3 – Predictive Validity (pending study). The OPAL is a research-based behavioral observation tool that measures teacher practices and classroom interactions from sociocultural and language acquisition perspectives. This observation protocol utilizes a six-point Likert-type scale (1-6, Low to High) to rate instruction for academic literacies, defined as a set of 21st century skills, abilities, and dispositions developed through the affirmation of and in response to students' identities, experiences, and backgrounds.

### **PHASE 1: CONTENT VALIDITY**

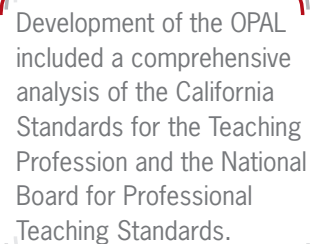
The first phase, item development, was established based on key elements from the literature and from the authors' previous work (Chamot & O'Malley, 1994; Cummins, 1981, 2000; Echevarria, Vogt, & Short, 2000; Gibbons, 2002; Krashen, 1982, 2003; Schleppegrell & Colombi, 2002; Lavadenz & Armas, 2008). Development of the OPAL included a comprehensive analysis of descriptors from the California Standards for the Teaching Profession (California Department of Education, 1997, 2009) and the National Board for Professional Teaching Standards: English as a New Language Focus (U.S. Department of Education, 1998, 2002). This correlation is available in the OPAL Training Manual. Selected teaching standards and essential elements outlined in the theoretical underpinnings of effective instruction for meeting the needs of linguistically diverse learners were also



A descriptive/observational research design allowed researchers to collect structured observational data using the OPAL.

considered during the development phase.

The team of content experts recognized that language and literacy development for ELLs require monitoring of learning and assurances that support daily lessons for maximum understanding of every content and language lesson. Thus, avenues for effective instruction were conceptualized around four constructs derived from the literature: (1) rigorous and relevant curriculum; (2) connections; (3) comprehensibility and; (4) interactions. Each of the constructs was defined and indicators were developed for each of the four areas. Content expert panel members comprised of classroom teachers, teacher coaches and facilitators, professors in colleges of education, educational research consultants, and an assistant district superintendent were then asked to review the indicators to eliminate redundancy, or lack of clarity for various indicators.



Development of the OPAL included a comprehensive analysis of the California Standards for the Teaching Profession and the National Board for Professional Teaching Standards.

During this first phase, 74 classrooms were utilized to field test the instrument and complete the content validity process. Reliability testing was conducted to ascertain a measure of internal consistency. The OPAL reliability analysis resulted in acceptable reliabilities as determined by the Cronbach's Alpha estimate presented in Table 1.

Table 1

Cronbach’s Alpha Internal Consistency Reliability Estimate

Construct	$\alpha$
Rigorous and Relevant Curriculum	.80
Connections	.80
Comprehensibility	.90
Interactions	.77

Measures of internal consistency yielded acceptable reliabilities. Results indicate that each OPAL construct includes indicators that are closely related.

**PHASE 2: CONSTRUCT VALIDITY**

Subsequently, Phase 2 in the validation process was conducted to establish construct validity for the OPAL. The following outlines the procedures taken to collect data for the construct validation process.

**Inter-rater Reliability**

Once the OPAL’s content validity was established, two lead raters identified classroom videos at the elementary and the secondary level to use as a model for training other raters on the use of the observation protocol. The lead raters worked with an expert panel to view the videos and establish anchor OPAL scores for each of the indicators. Scores ranged from 1 (low implementation) to 6 (high level of implementation) and were corroborated by noting and cross-checking evidence through anecdotal notes taken during the observation session. These classroom videos exemplified a medium to high level of implementation, with ratings ranging from 3 – 6 for each of the OPAL’s 18 indicators.

Training sessions for each subsequent rater were conducted using the process described here. First, raters attended a session where an overview of the observation instrument (the OPAL) was provided, including its conceptual framework and alignment to the California Professional Standards to the Teaching Profession (California Department of Education, 1997, 2009) and the National Board for Professional Teaching Standards: English as a New Language (U.S. Department of Education, 1998, 2002). During this same session, each of the OPAL's constructs (Rigorous & Relevant Curriculum, Connections, Comprehensibility, and Interactions) was introduced and the rating scale for each indicator was discussed. Sample ratings were presented using written exemplars for each indicator. Particular attention was given to the wording for each indicator; the alignment of each indicator to the standards for the teaching profession; the significance of each indicator for classroom contexts with culturally and linguistically diverse students; and the qualitative difference between ratings (e.g., the difference between a 2 and a 3, or a 5 and a 6). The selected classroom videos were presented and raters scored the observation using the OPAL. Each rater's score was recorded, compared, and discussed. Given that all of the raters were experienced educators, the examination of scores for consensus-building provided an opportunity for each rater to discuss his/her score based on specific, observable evidence recorded in anecdotal section of the OPAL. Practice with two video lessons afforded raters multiple instances to clarify rating procedures.

Prior to independent scoring, each rater practiced applying the rating scale with one of the lead raters in a common classroom. This set of observations was used to establish inter-rater reliability and certify the rater as an independent scorer. Inter-rater reliability was examined using a consensus approach (Stemler, 2004). This study warranted the use of

consensus estimates of inter-rater reliability because the OPAL is a nominal rating scale that represents a linear continuum of a construct, based on a Likert-type scale. Each rater was trained on how to interpret and apply the rating scale to the point where each of the scores given by different raters could be treated as equivalent. Inter-rater reliability evidence was calculated for 10% of classroom observation ratings of the OPAL instrument using Cohen's kappa statistic as an estimate of inter-rater reliability (Cohen, 1960, 1968). An exact rater percent agreement was attained between OPAL raters, resulting in a minimally acceptable Kappa index of .72.

Each rater was trained on how to interpret and apply the rating scale to the point where each of the scores given by different raters could be treated as equivalent.

### **Participants**

The OPAL validation study was conducted with a sample size of 303 classrooms selected from 22 schools in the southern California region, wherein reside over 65% of the 1.6 million English learners in the state. Table 2 presents school site demographics. The 22 schools service students in Pre-K through grade 12, and represent the full spectrum of educational situations for English Learners, from schools where as few as 14.7% of the students are socio-economically disadvantaged (SED), to schools where as many as 86.5% of the students are SED.

Table 2

## School Demographics

School	Student Enrollment	Percent of English Learners	Total Reclassified as Fluent English Proficient	Number of Teachers
<u>Pre-School</u>				
Early Education Learning Program				
	80	62.3%	Not Applicable	5
<u>Elementary Schools</u>				
Elementary School A	833	54.1%	32	40
Elementary School B	526	49.8%	18	23
Elementary School C	773	62.4%	45	32
Elementary School D	650	81.4%	2	34
Elementary School E	853	51.9%	27	41
Elementary School F	730	49.0%	95	30
Elementary School G	996	66.8%	91	46
Elementary School H	431	72.6%	26	23
Elementary School I	592	56.6%	21	27
<u>Middle Schools</u>				
Middle School A	1,633	28.4%	62	65
Middle School B	663	25.5%	53	29
Middle School C	1,274	40.2%	75	9
Middle School D	1,963	46.8%	297	78
Middle School E	905	29.6%	19	46
Middle School F	730	49.0%	95	30
Middle School G	1086	18.4%	29	35
<u>High Schools</u>				
High School A	2,418	20.0%	78	72
High School B	2,328	25.5%	5	75
High School C	2,839	19.1%	103	103
High School D	1,842	9.9%	17	78
High School E	411	33.8%	35	12

A two-tiered, cluster-random sampling procedure (Keppel, 1991) was utilized to select teachers instructing students in grades Pre-K -12. Careful attention was given to the identification of an equal number of classrooms at each grade level in the elementary, middle, and high school grade spans. Additionally, a proportional representation of program types for English Language Learners (i.e. Structured English Immersion, Dual Language, Transitional Bilingual Program, and Mainstream English

Demographic data gathered for the targeted teacher group reveal that the average teaching experience was 8.99 years with a range of 1 month to 34 years.

Program) was selected for observational data collection. Demographic data gathered for the targeted teacher group reveal that the average teaching experience was 8.99 years with a range of one month to 34 years. The average length of time teaching at the respective school sites ranged from one month to 32 years, with a mean of 5.85. Nineteen percent of teachers observed were male while 81% were female.

### **Raters**

Observations were conducted by five raters, all with ample experience in the area of second language acquisition and effective teaching practices for linguistically and ethnically diverse learners. Three raters hold doctorates in education, and two are second and third year doctoral candidates. In addition, four of the five raters hold a California Clear Multiple Subject or Single Subject Teaching Credential with Spanish Bilingual Certification - Bilingual, Cross cultural, Language and Academic Development (BCLAD) or Bilingual Competence Certificate (BCC). One of the raters holds a Preliminary Single Subject Teaching Credential with Spanish Bilingual Certification (BCLAD). Two of the raters hold a California Administrative Services Credential and have served in school and district leadership positions. All raters have taught,



mentored, and coached in the K-12 context for an average experience level of over 25 years. Furthermore, each of the raters has taught university undergraduate and graduate level courses, with experience at this level ranging from 2– 18 years. Three of the raters serve as full-time faculty in the school of education at a private university in southern California.

### **Classroom Observations**

Classroom observations were conducted during school hours and were 20-30 minutes in length. A schedule of observations was provided to participating school sites one to two weeks prior to the visitations. Observations occurred primarily during Language Arts, English Language Development (ELD), and Mathematics instructional periods at the elementary school level. Secondary classroom observations were conducted in Language Arts, Mathematics, ELD/ESL (English as a Second Language), History-Social Science, and Science classrooms.

Teachers were informed in writing of the purpose and procedures of the research study, as well as their right to refuse to participate in, or withdraw from the research at any time. Anonymity of all participants was insured through the use of a numbered coding system. A single rater entered each classroom without interrupting the lesson or activity and sat in the back of the room, remaining as unobtrusive as possible. The trained observer

rated classroom practices for all indicators under each of the OPAL's four constructs (Rigorous & Relevant Curriculum, Connections, Comprehensibility, and Interactions). Classroom practices and interactions were rated on a six-point scale (1 – 6, low to high). Anecdotal notes were written for each OPAL construct, delineating teacher practices, student engagement and interaction, and classroom environmental print and materials.

Anecdotal notes were written for each OPAL construct.

## DATA ANALYSIS AND RESULTS

Confirmatory Factor Analysis (CFA) was selected as the primary statistical analysis method used to extend the usefulness of exploratory methods (Daniel & Siders, 1994) and to establish construct validity of the OPAL. The researchers rearranged and revised the items on the OPAL and consequently tested a four-factor solution using CFA. It was hypothesized that the OPAL contains research-based essential practices as determined by four constructs/factors: Rigorous and Relevant Curriculum, Connections, Comprehensibility, and Interactions.

Maximum likelihood estimation was used for the CFA using Analysis of a Moment Structures (AMOS 16), since the latent constructs were found to be normally distributed. The data came from 18 items on a Likert-type scale classroom observation instrument. A sample size of  $N=303$  was determined to be adequately large to establish a minimum of 10 cases per latent variable (Schreiber, Stage, King, Nora & Barlow, 2006). A correlation table with means, standard deviations, number of items and alpha levels for all latent constructs is provided in Table 3.

Table 3

Descriptive Statistics with Correlations

Construct	Mean	STD	Items	$\alpha$
Rigorous and Relevant Curriculum	3.10	1.05	6	.80
Connections	2.93	1.16	3	.80
Comprehensibility	3.69	1.31	5	.90
Interactions	3.32	1.03	4	.77

\*\*p < .01

The theoretical model with standardized parameter estimates and squared multiple correlations is presented in Figure 1. It was hypothesized that a four-factor model would be confirmed in the measurement portion of the model. Normality assumptions for the four OPAL Constructs were verified using the AMOS 16.0 and SPSS 15.0 programs. A total of 303 OPAL classroom observation samples were available for analysis. Individual ratings for every indicator were recorded in all but 12 cases where the raters deemed the indicator “not observable.” We used a mean imputation procedure to replace each missing value with plausible values using the variable mean of the complete cases. The confirmatory factor analysis provided an excellent fit to the data,  $\chi^2 = 362.68$ ;  $df = 125$ ; Comparative Fit Index (CFI) = .93; Tucker-Lewis Fit Index (TLFI) = .92; Root Mean Square Error of Approximation (RMSEA) = .079.

The confirmatory factor analysis provided an excellent fit to the data. Results indicate the OPAL is a valid and reliable instrument.

These values indicate a good fit between the hypothesized model and the observed data.

Standardized parameter estimates are indicated in Figure 1; standardized factor loadings by latent construct are given in Table 4.

Table 4

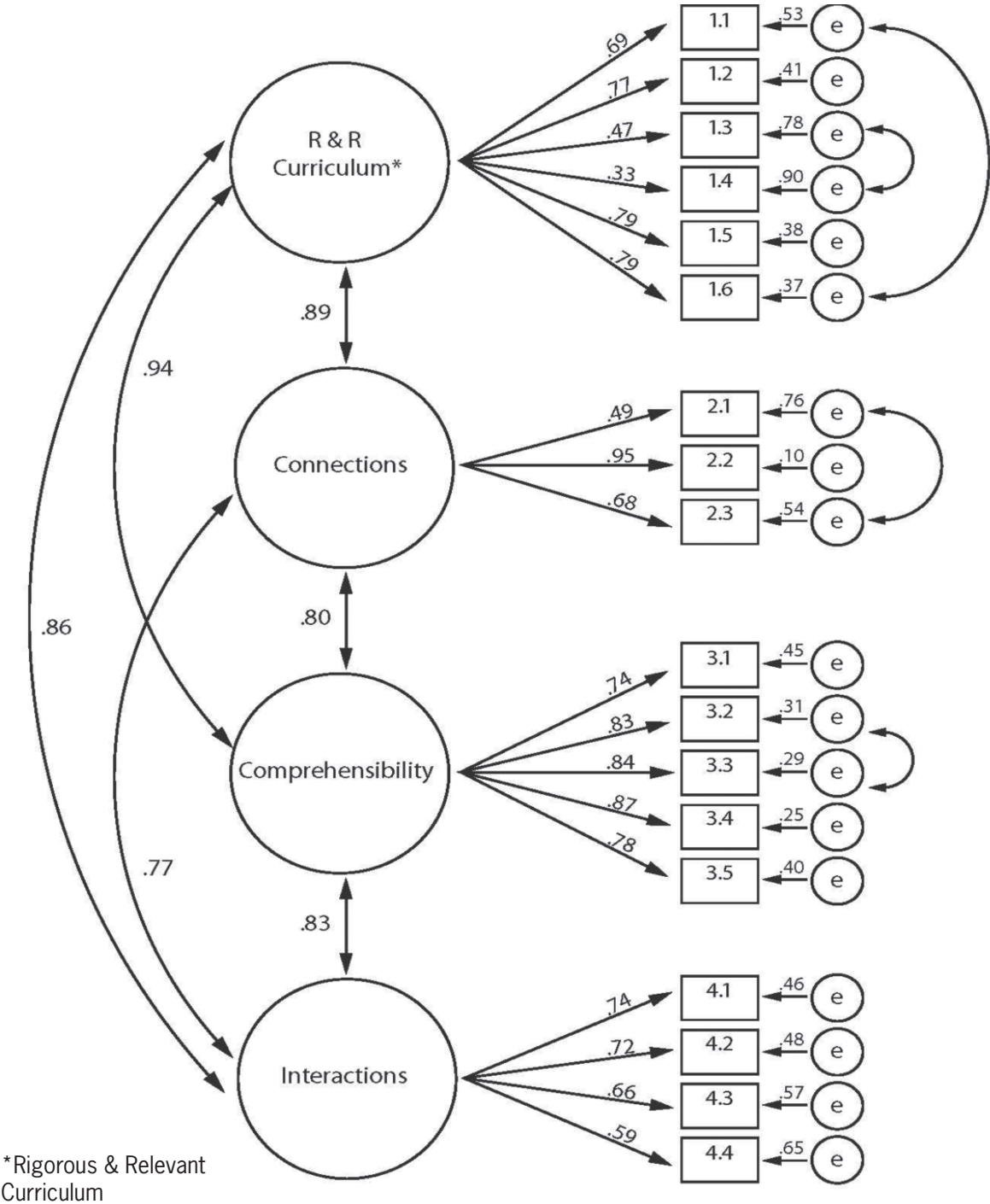
Standardized Factor Loadings for Each Item by Latent Construct

	Latent Construct	Items	Factor Loadings
Factor 1	Rigorous and Relevant Curriculum	1.1	.69
		1.2	.77
		1.3	.47
		1.4	.33
		1.5	.79
		1.6	.79
Factor 2	Connections	2.1	.49
		2.2	.95
		2.3	.68
Factor 3	Comprehensibility	3.1	.74
		3.2	.83
		3.3	.84
		3.4	.87
		3.5	.78
Factor 4	Interactions	4.1	.74
		4.2	.72
		4.3	.66
		4.4	.59

The squared multiple correlation values also are provided and indicate (lower limit) the reliability of the observed variable in relation to the latent construct; observed variables 2.2 and observed variables 1.4 have the highest and lowest squared multiple correlations, respectively (see Figure 1). A sample interpretation of the squared multiple correlations are, for example, the construct Content accounts for 69 % of the variance in observed variable 1.1

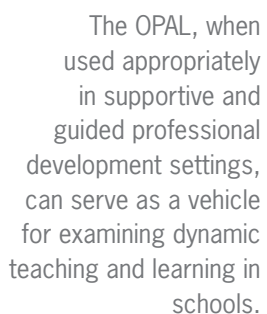
in these data. No post-hoc modifications were indicated from the analysis due to good-fit indices results, and the residual analysis did not indicate any need for further modifications of the model.

Figure 1. OPAL Model



## CONCLUSIONS AND SIGNIFICANCE

Our results indicate that the OPAL has good potential for use in classrooms with ethnically and linguistically diverse students, including ELLs. The contributions of the instrument in



The OPAL, when used appropriately in supportive and guided professional development settings, can serve as a vehicle for examining dynamic teaching and learning in schools.

K-12 classrooms are immense. Given the national achievement gap between ELLs and their native English speaking peers, the OPAL, when used appropriately in supportive and guided professional development settings, can serve as a vehicle for examining dynamic teaching and learning in schools. The OPAL can be used in teacher education programs in the preparation of teachers of ELLs as a coaching tool to focus teacher practices in each of the domains.

A condition for the use of the OPAL will be the adequate training of the observers (Roberson, 1998). Key studies on classroom observations indicate that the skill, bias, and preparation of the observers are essential factors that affect the accuracy of results. Additional research with the OPAL will include correlational research designs, such as predictive validity identified in Phase 3 of this study. This will serve to investigate the relationship between classroom observation results and student achievement measures. Predictive validity for the OPAL, as well as concurrent validation of the OPAL and other classroom observation measures (as they become available) would be valuable in the national discussion on multiple measures.

More explicitly, the U.S. Department of Education's Race to the Top agenda linking teacher effectiveness to student achievement (U.S. Department of Education, 2002) creates greater pressures on the educational community to accurately use observational research to guide and inform instructional practices for ELLs. As one of the most underserved groups among the school-age population in this nation, using theoretically and empirically grounded measures to examine classroom practices for ELLs is direly needed.

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## REFERENCES

- Abedi, J. (2008). Measuring students' level of English proficiency: Educational significance and assessment requirements. *Educational Assessment*, 13(2-3).
- Bailey, A.L. (2007). *The language demands of school: Putting academic English to the test*. New Haven, CT: Yale University Press.
- Ballantyne, K.G., Sanderman, A.R., & Levy, J. (2008). *Educating English language learners: Building teacher capacity*. Washington, DC: National Clearinghouse for English Language Acquisition. Retrieved from [http://www.ncele.gwu.edu/practice/mainstream\\_teachers.htm](http://www.ncele.gwu.edu/practice/mainstream_teachers.htm).
- Batalova, J., Fix, M., & Murray, J. (2007). *Measures of change: The demography and literacy of adolescent English learners—A report to Carnegie Corporation of New York*. Washington, DC: Migration Policy Institute.
- Brinton, D.M., Snow, M.A., & Wesche, M.B. (1989). *Content-based second language instruction*. Mass.: Heinle & Heinle.
- Bruce, K., Lara-Alecio, R., Parker, R., Hasbrouck, J., Weaver, L. & Irby, B. J. (1997). Inside transitional bilingual classrooms: Accurately describing the language learning process. *Bilingual Research Journal*, 21 (2&3), 123-142.
- Bruner, J.S. (1978). The role of dialogue in language acquisition. In A. Sinclair, R.J. Jarvella, & W.J.M. Levelt (Eds.), *The child's conception of language*. New York: Springer-Verlag.
- California Department of Education, California Commission on Teacher Credentialing. (1997). *California Standards for the Teaching Profession*. Retrieved from [http://www.iawp.ucr.edu/teacher\\_support/cstreport.pdf](http://www.iawp.ucr.edu/teacher_support/cstreport.pdf).



- California Department of Education, California Commission on Teacher Credentialing. (2009). California standards for the teaching profession. Retrieved from <http://www.ctc.ca.gov/educator-prep/standards/CSTP-2009.pdf>.
- Carlo, M.S., August, D., McLaughlin, B., Snow, C.E., Dressler, C., Lippman, D.N., Lively, T.J., & White, C.E. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. *Reading Research Quarterly* 39(2): 188-215.
- Center on Education Policy. (2005). States try harder, but gaps persist: High school exit exams 2005. Washington, DC: Center on Education Policy. Retrieved October 28, 2008 from <http://www.cepdc.org/highschool/exit/reportAug2005/hseeAug2005.pdf>.
- Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. Reading, MA: Addison- Wesley.
- Cohen, J. (1960). A coefficient for agreement for nominal scale Educational and Psychological Measurement. 20, 37-46.
- Cohen, J. (1968). Weighted kappa: Nominal scale agreement with provision for scale disagreement or partial credit. *Psychological Bulletin* 70, 213-220.
- Collier, V.P., & Thomas, W.P. (2003). The multiple benefits of dual language. *Educational Leadership*, 61(2).
- Cummins, J. (1981). The role of primary language development educational success for language minority students. In California State Department of Education (Ed.) *Schooling and language minority students: A theoretical framework*. (pp. 3-49). Los Angeles: National Dissemination and Assessment Center.

- Cummins, J. (1996). *Negotiating cultural identities: Education for empowerment in a diverse society*. California Association for Bilingual Education: CA.
- Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in crossfire*. Clevedon: Multilingual Matters.
- Daniel, L., & Siders, J. (1994). Validation of teacher assessment instruments: A confirmatory factor analytic approach. *Journal of Personnel Evaluation in Education*, 1, 29-40 .
- Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.
- Echevarria, J., Vogt, M. E., & Short, D. (2000). *Making content comprehensible for English language learners: The SIOP Model* . Boston: Allyn & Bacon.
- Echevarria, J. & Short, D. (2004). Using multiple perspectives in observations of diverse classrooms: The Sheltered Instruction Observation Protocol (SIOP). In H. Waxman, R. Tharp & S. Hilberg (Eds.), *Observational research in U.S. classrooms: New approaches for understanding cultural and linguistic diversity* (pp. 21-47). Boston: Cambridge University Press.
- Finocchiaro & Brumfit (1983). *The functional-notional approach*. Oxford: Oxford University Press.
- Garcia, O., Kleifgen, J.A., & Falchi, L. (2008). *From English language learners to emergent bilinguals*. Research Policy Brief #1. Equity Matters. New York: Teachers College, Columbia University.
- Gersten, R., & Baker, S. (2000). What we know about effective instructional practices for English Learners. *Exceptional Children*, 66, 454-470.

- Gibbons, P. (2002). *Scaffolding language, scaffolding learning: Teaching second language learners in the mainstream classroom*. Westport, CT: Heinemann.
- Harvard Civil Rights Project. (2005). *Confronting the graduation rate crisis in California*. Retrieved from <http://www.civilrightsproject.ucla.edu/research/dropouts/dropouts05.php>.
- Hilberg, R.S., Waxman, H.C. & Tharp, R.G. (2004). Introduction: Purposes and perspectives on classroom observation research. In H.C. Waxman, R.G. Tharp, & R.S. Hilberg (Eds.), *Observational research in the U.S. classrooms: New approaches for understanding cultural and linguistic diversity* (pp. 1-20). Cambridge, England: Cambridge University Press.
- Hoge, R.D. (1985). The validity of direct observation measures of pupil classroom behavior. *Review of Educational Research*, 55, 469-483.
- Holt, D. (Ed.). (1993). *Cooperative learning: A response to linguistic and cultural diversity*. McHenry, IL: Delta Systems.
- Hyson, M.C., Hirsh-Pasek, K., & Rescorla, L. (1990). The classroom practices inventory: An observation instrument based on NAEYC's guidelines for developmentally appropriate practices for 4-and 5-year-old children. *Early Childhood Research Quarterly*, 5, 475-494.
- Keppel, G. (1991). *Design and analysis: A researchers' handbook* (3rd ed.). EnglewoodCliffs, NJ: Prentice Hall.
- Krashen, S. (1982). *Principles and practice in second language acquisition*. New York: McGraw-Hill.

- Krashen, S. (2003). *Explorations in language acquisition and use: The Taipei lectures*. Portsmouth, NH: Heinemann.
- Lavadenz, M., & Armas, E. (2008). Differentiation instruction for English learners. *California English*, 13(4), 16-20.
- Lucas, S.R., & Beresford, L. (2010). Naming and classifying: Theory, evidence, and equity in education. *Review of Research in Education*, 34(1), 24-84.
- Matsumura, L. C., Patthey-Chavez, G. G., Valdes, R. & Garnier, H. (2002). Teacher feedback, writing assignment quality, and third-grade students' revision in higher and lower achieving schools. *The Elementary School Journal*, 103, 3-25.
- McMillan, J.H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry*. Boston, MA: Ally and Bacon.
- Ovando, C.J., Collier, V.P., & Combs, M.C. (2003). *Bilingual and ESL classrooms: Teaching in multicultural contexts* (3rd ed.). New York: McGraw-Hill.
- Pianta, R.C., & Hamre, B.K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Education Researcher*, 38, 109-199.
- Rampey, B.D., Dion, G.S., and Donahue, P.L. (2009). *NAEP 2008 Trends in Academic Progress* (NCES 2009-479). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C.
- Roberson, T.J. (1998). *Classroom Observation: Issues regarding validity and reliability*. Paper presented at the Annual Meeting of the Mid-South Educational Research Association.

- Ruiz-de-Velasco, J., & Fix, M. (2000). *Overlooked & underserved: Immigrant students in U.S. secondary schools*. Washington, D.C.: The Urban Institute.
- Rumberger, R., & Gandara, P. (2009). Immigration, language, and education: How does language policy structure opportunity? *Teacher College Record*, 111, 750-782.
- Santamaria, L.J. (2009). Culturally responsive differentiated instruction: Narrowing gaps between best pedagogical practices benefiting all learners. *Teachers College Record*, 111(1), 214-247.
- Saunders, W., & Goldenberg, C. (2010). Research to guide English language development instruction. In *Improving education for English learners: research-based approaches* (pp. 21-82). Sacramento: California Department of Education.
- Schleppegrell, M. J., & Colombi, M.C. (Eds). (2002). *Developing advanced literacy in first and second languages: Meaning with power*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Schreiber, J.B. , Stage, F.K., King, J., Nora, A., & Barlow, E.A. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99, 323-337.
- Skutnabb-Kangas, T. (2000). *Linguistic genocide in education or worldwide diversity and human rights?* Mahwah, NJ: Lawrence Erlbaum Associates.
- Stemler, S.E. (2004). A comparison of consensus, consistency, and measurement approaches to estimating interrater reliability [electronic version]. *Practical Assessment, Research & Evaluation*, 9(4), Retrieved from <http://PAREonline.net/getvn.asp?v=9&n=4>.

- Strassman, B. (2005). Review of: Barbara King-Shaver and Alyce Hunter. (2003). *Differentiated instruction in the English classroom: Content, process, product and assessment*.  
Portsmouth, NH: Heinemann *Journal of Adolescent and Adult Literacy* 48:4. pp358-359.
- Swain, M. (1986). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In J. Cummins & M. Swain (Eds), *Bilingualism in Education* (pp.116-137). New York: Longman.
- Tomlinson, C. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). Virginia: Association for Supervision and Curriculum Development (ASCD).
- U.S. Department of Education. (1998, 2002). National board for professional teaching standards. *English as a new language standards* (2nd,3rd ed.). Retrieved from [http://www.nbpts.org/userfiles/File/emc\\_enl\\_standards.pdf](http://www.nbpts.org/userfiles/File/emc_enl_standards.pdf).
- Villegas, A.M., & Lucas, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education*, 53(1), 20-32.
- Walqui, A. (2001). Accomplished teaching with English learners: A conceptualization of teacher expertise. *Multilingual Educator*, 1,4, 51-55.
- Wong Fillmore, L. & Snow, C. (2000). *What teachers need to know about language*. Washington, D.C: Center for Applied Linguistics.

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Dr. Magaly Lavadenz currently serves as Distinguished Professor of English Learner Policy, Research and Practice in the Department of Educational Leadership and Founding Executive Director of Loyola Marymount University's Center for Equity for English Learners. Previous academic appointments include as Chair of the Teacher Education, Founding Associate Director of LMU's doctoral program in Educational Leadership for Social Justice, and as Founding Director of Spanish and Mandarin Bilingual/Bicultural Teacher Education and TESOL programs.

She has held many leadership positions, including as President of Californians Together, a statewide advocacy organization that promotes quality education for the state's dual language learners and emerging bilingual students, as President of the California Council on Teacher Education, the California Association for Bilingual Education, and as founding president of the California Association of Bilingual Teacher Educators. She engages actively with state, district, county and school partners to support equitable access to quality multilingual education in the state, nation and internationally.

Her research in the areas of educational equity, the preparation and support of teachers and leaders of English Learners, Latin@ communities, and biliteracy has been published in journals, book chapters and books, including *Latinos and Civil Rights in Education: La Lucha Sigue* with Anaida Colón Muñiz. She has served as principal investigator for over 40 grant projects.

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Dr. Armas holds a Teaching Credential, with Bilingual Authorization in Spanish as well as an administrative credential. She earned an Ed.D. from the University of Southern California with an emphasis in Language, Literacy and Learning.

*The OPAL supports the refinement of classroom practices and interactions to position teachers as knowledgeable professionals accomplished in curriculum, linguistics, cross cultural understanding, and student advocacy.*

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