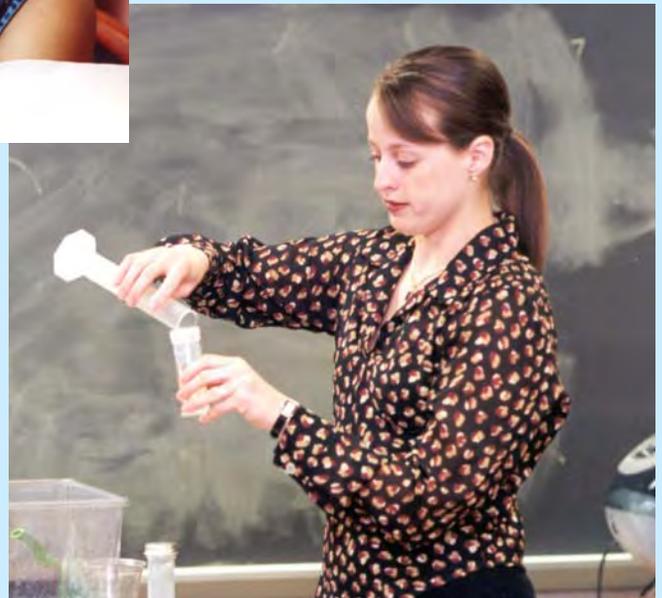
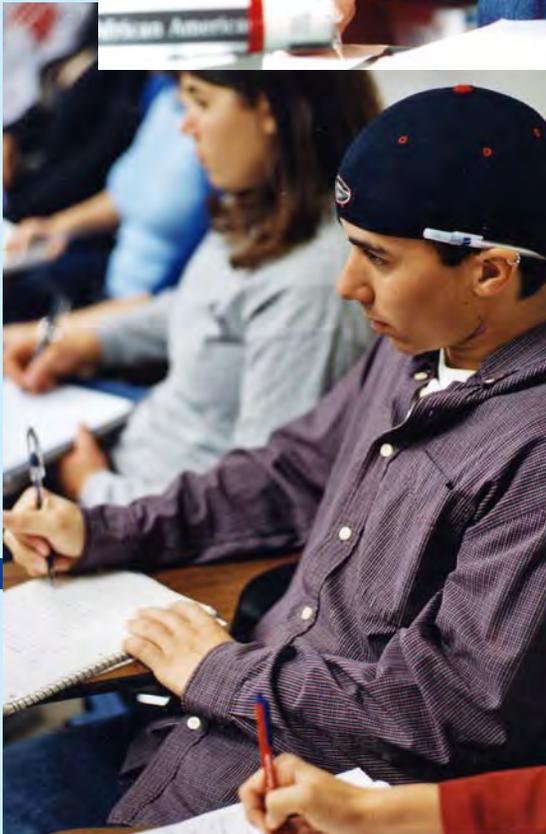


Educating English Language Learners: Building Teacher Capacity

Roundtable Report



National Clearinghouse for English
Language Acquisition
2008

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Introduction

Given the current demographic shifts in the U.S. population, it is likely that all teachers at some point in their careers will encounter students who do not yet have sufficient proficiency in English to fully access academic content in traditional classrooms. Many teachers do not have preparation to provide high-quality instruction to this population of students. This report considers the initial and continuing education of pre-service and practicing teachers as they pertain to teaching students from diverse linguistic backgrounds.

In this report, we present a vision of teacher education and professional development that:

- Is ongoing and integrated throughout the working life of educational personnel;
- Is effective and relevant along a continuum of teacher education for pre-service and in-service teachers within a university setting, as well as staff development tailored to novice teachers, experienced teachers and experts;
- Is effective and relevant for all educational personnel, including paraeducators, teachers, principals, district staff, and SEA staff;
- Is tightly intertwined with disciplinary standards and pedagogical content knowledge;
- Involves collaborative active learning within professional learning communities;
- Is driven by research and data and is continually evaluated and refined;
- Attends to multiple dimensions of diversity and fosters cross-cultural learning; and
- Results in improved student outcomes and a narrowing of the achievement gap for English language learners.

Background

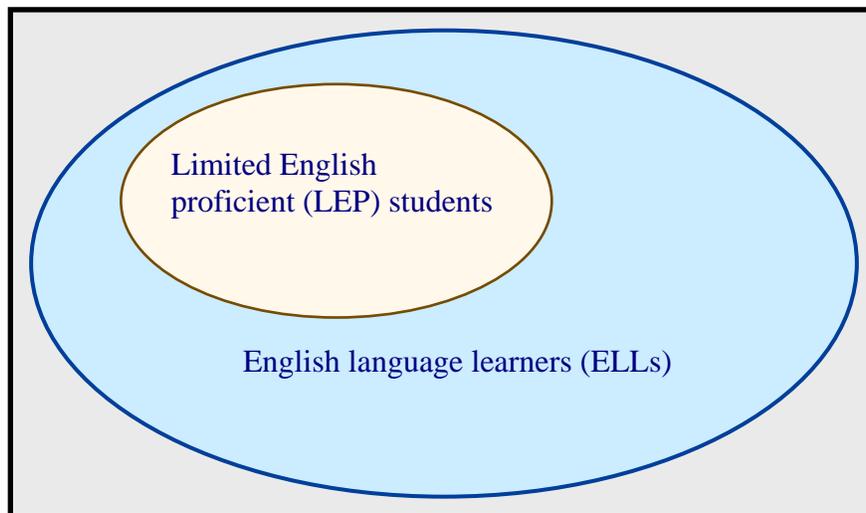
In the Fall of 2007, the U.S. Department of Education’s Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficient Students (OELA) established the following strategic priority:

Develop policy and program recommendations to improve the professional development of English language learner content teachers.

The National Clearinghouse for English Language Acquisition (NCELA) assisted OELA by forming a panel of experts and convening a *Roundtable on Teacher Education and Professional Development of ELL Content Teachers*. The panel met on January 24, 2008, in Washington, DC, to discuss the substance and format of this report. In addition, the panel members submitted recommendations of the most recent and relevant research on the subject. Panel members’ names and affiliations appear in the Appendix.

Definitions

The term **English language learners (ELLs)** in this report refers to those students who are not yet proficient in English and who require instructional support in order to fully access academic content in their classes. ELLs may or may not have passed English language proficiency (ELP) assessments. The subset of ELLs who have not yet achieved ELP as measured by the particular assessment procedures of their state are often referred to as Limited English Proficient (LEP) students. Students who have passed ELP assessments, however, may still need support in acquiring and using language in the classroom, particularly with the complex academic language that leads to successful high school graduation and higher education opportunities (Francis, Rivera, Lesaux, Kieffer & Rivera, 2006).



Mainstream teachers are the set of teachers at whom this report is directed. ELLs may be taught by teachers who specialize in teaching students who are not yet fully proficient in English, and many ELLs receive all or part of their instruction from teachers with certifications in English for Speakers of Other Languages (ESOL), English as a Second Language (ESL), or bilingual education. In this report, we refer to all other teachers interchangeably as mainstream, content area, or general education teachers.

How To Use This Report

This report is comprised of three volumes:

- I: Teacher Education and Professional Development for Mainstream Teachers of English Language Learners
- II: Annotated Bibliography
- III: State Requirements for Pre-service Teachers of ELLs

Volume I: Teacher Education and Professional Development for Mainstream Teachers of English Language Learners

This volume consists of three chapters. The **Rationale** provides background data and demographics for English language learners and their teachers. The Rationale reports on a variety of large and small scale studies to paint a picture of the current numbers of English language learners and of their educational progress. It also summarizes current research on the education that teachers have received in working with this population, including data regarding preparation prior to and during their teaching careers. The Rationale is of use to all stakeholders interested in the education of English language learners but may be particularly useful to policymakers and other decision makers examining broader trends which establish the need for further teacher development.

The second chapter, **Guide for Program Development**, is intended primarily for university faculty, staff development personnel, state and district administrators, and principals. It discusses the structure of teacher education and professional development programs, including program design, assessment, evaluation, and modes of delivery. The chapter is divided into two sections: University-based Teacher Education, and Professional Development for Practicing Teachers. The first section presents a set of suggestions for teacher education in a university setting (including both pre-service and in-service programs) that are aligned with the standards of the National Council for the Accreditation of Teacher Education (NCATE). The recommendations in the second section are aligned with the National Staff Development Council (NSDC) standards, and the section presents guidelines for professional development programs within school districts.



Throughout the report, practical tools for teachers and for teacher educators and staff developers are set off within the text by the wrench icon.

The final chapter of Volume I is entitled **Guide for Mainstream Teachers of English Language Learners**. This chapter deals primarily with the content of teacher education and professional development programs. Although intended for teacher educators and professional developers who are creating educational content, this chapter's research-based practical suggestions are also useful for classroom teachers.

Included within this chapter are guidelines specific to the four core content areas: English language arts, social studies, science, and mathematics. These short guidelines can serve either as stand-alone resources or in combination with the entire section. Each content area guideline contains information on the vocabulary, language structures and contextual factors relevant to the particular discipline. These are followed by a list of web and print resources appropriate for teachers who wish to pursue further research in their content area. It is important to stress that these guidelines are a beginning point for teachers, and should not become boilerplates for the widely critiqued "one-shot workshop." They should be used in conjunction with the suggestions provided elsewhere in this document—for instance, as an initial reading for a professional learning community.

Volume II: Annotated Bibliography

The annotated bibliography was compiled from research suggested by the Roundtable panel. As supporting material to Volume I, the Bibliography conforms to a similar format. It includes selected abstracted references for the rationale, for teacher education and professional development programs, and for curriculum and instruction.

Volume III: State Requirements for Pre-service Teachers of ELLs

The final volume of the document was written in January, 2008, and was provided to panelists before the January 24, 2008, Roundtable meeting as background material. It was made available on NCELA's website under the title *Teaching ELLs in mainstream classrooms: State-by-State requirements for all pre-service teachers* in February, 2008¹, and was further revised in May, 2008. This volume examines states' requirements for all pre-service teachers in ELL education. As expected, states vary in terms of the preparation required of newly licensed teachers. There are four states which require specific coursework or separate certification. In seventeen states, certification standards refer to the special needs of ELLs. The NCATE standards for teacher certification (NCATE, 2006) are used by seven states; these standards have recently been changed to include reference to the particular needs of ELLs. For eight states, the standards for newly certified teachers contain some reference to "language" as an element of diversity. Finally, fifteen states do not have any requirement that newly certified teachers be prepared in ELL education.

This report serves two broad purposes. It informs federal, state, and local policymakers responsible for the teacher education and professional development of ELL content teachers, and simultaneously offers a functional resource guide for teachers and other

¹ The February, 2008, version is available at http://www.ncela.gwu.edu/policy/legislation/pre-service_reqs.pdf.

practitioners. Its goal is to meaningfully add to—not replace—the extensive literature on the preparation and professional development of ELL content teachers.

**Educating English Language Learners:
Building Teacher Capacity
Roundtable Report**

Volume I

**Teacher Education and Professional
Development for Mainstream Teachers of
English Language Learners**

1. Rationale

Over the last decade, America's schools have experienced a sharp increase in the number of students who are not proficient enough in English to fully access academic content in all of their classes. English language learners (ELLs) tend to be poorer, perform less well on standardized tests, and drop out of high school at rates higher than their English speaking peers. More and more teachers of "mainstream" general education classes, who normally do not have special training in ESOL or bilingual education, are faced with the challenge of educating these children. Even the most committed teachers cannot provide high quality education without appropriate skills and knowledge. This section provides a rationale for increased teacher education and professional development for mainstream teachers by briefly describing key features of the ELL population and the current teacher capacity to address the needs of these learners.

English language learners and their teachers: Background and demographics

There are over five million ELLs enrolled in America's schools. Both the number and the proportion of ELLs are growing rapidly. Raw numbers of ELL students have jumped by 57% over the past ten years (NCELA 2007). These students are more likely to be poor and to come from less educated families than the overall pupil population. Further, their performance on standardized tests and their graduation rates are well below their non-ELL peers.

Almost six in ten (59%) adolescent ELLs qualify for free or reduced price lunch.² This is more than double the proportion of English proficient students, only 28% of whom receive such services (Batalova, Fix, & Murray, 2005). Data taken from the 2000 U.S. Census indicates that the education levels of the parents of ELLs are much lower than those of English proficient students. For parents of ELL children in elementary school, almost half had not completed high school, and a quarter had less than a ninth grade education. For English proficient (EP) children, the proportions are 11% and 2% respectively. For parents of high school ELLs, 35% had not completed high school (compared to 9% of the parents of EP students), and 26% had not completed the ninth grade (compared to 4% for parents of EP students) (Capps et al., 2005).

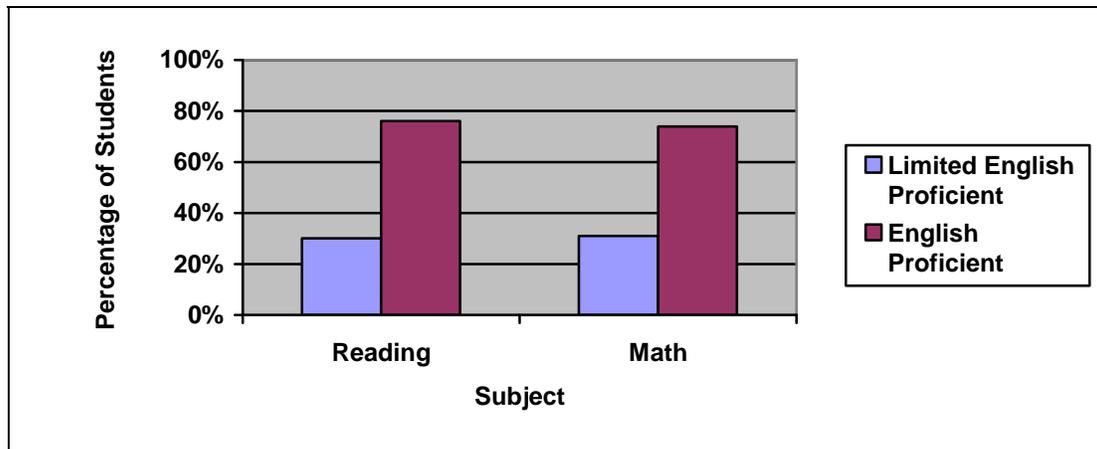
English Language Learners: Demographics

- There are over five million ELLs in the United States.
- This number has risen by 57% over the past ten years.
- Nearly six in ten ELLs qualify for free or reduced price lunch.
- Eighth-grade ELLs' scores are less than half those of English speaking peers on tests of reading and mathematics.
- Students from households which speak a language other than English at home lag twenty points behind in high school completion rates.

² For the period July 1, 2007 through June 30, 2008, 130% of the federal poverty level for a family of four is \$26,845. Children from households whose annual income is less than this figure are eligible for free lunch. Children from households whose earnings are less than 185% of the federal poverty level (equivalent to \$38,203 for a family of four) are eligible for reduced-price lunch (U.S. Department of Agriculture, 2007).

Measures of school performance indicate that ELLs are not performing as well as their EP peers. The National Assessment of Educational Progress (also known as “The Nation’s Report Card”) collects data on student performance at the fourth-grade and eighth-grade level. At the eighth-grade level, 76% of EP students scored at or above basic in reading; 74% scored at or above basic in mathematics. ELLs’ scores were considerably lower, with only 30% at or above basic in reading and only 31% at or above basic in mathematics.

Figure 1: Eighth-grade Students at or Above Basic in Reading and Mathematics, 2007



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (2007a) & (2007b).

These trends extend to performance on high school exit examinations and to graduation rates. A recent study on high school exit examinations for 22 states found gaps in initial pass rates for mathematics as high as 30-40 percentage points between ELLs and EP students, with higher gaps in reading (Center on Education Policy, 2005).

Accurate disaggregated nationwide data on high school graduation rates are difficult to find, but the existing information strongly points to a higher dropout rate for ELLs than non-ELLs. In a study assessing the labor market participation and readiness of linguistic minorities, the National Center for Educational Statistics (U.S. Department of Education, NCES, 2004) examined Census Bureau data and found that young adults from linguistic minority backgrounds were less likely to have completed high school than native English speakers. In the Census Bureau data, a member of a linguistic minority is defined as an individual who speaks a language other than English at home (a definition which includes both individuals of limited English proficiency as well as English-proficient individuals who speak another language at home). The data describe rates of high school completion among 18-24 year olds, including both 4-year completion and completion of high school equivalency tests such as the GED. Of young adults who spoke English at home, 89.9% had completed high school. Young adults from linguistic minority backgrounds lag behind their native English speaking peers, with high school completion rates of only 69.3%. While this number seems unusually high in comparison to commonly cited figures for four-year graduation rates, it includes those who return to school to earn a GED or similar diploma after their age cohort has graduated.

ELLs may receive instruction in a variety of settings, including bilingual or structured English immersion programs, but an increasing number can be found in mainstream classrooms. The proportion of teachers who are charged with the task of providing high quality instruction to these students has also grown substantially. In the ten year period between 1991-2001 the proportion of teachers who taught at least one ELL more than doubled (from 15% to 43% of all teachers) (Zehler et al., 2003). Given the growth of the ELL population over the past ten years, it is probably safe to assume that a majority of American teachers now have at least one ELL in their classes.

Providing quality instruction to English language learners requires teachers who are skilled in a variety of curricular and instructional strategies. Research on teacher training and preparedness, however, suggests that teachers who do not hold bilingual or ESL certification are not well prepared to meet the needs of these children (Alexander, Heaviside & Farris, 1999; Karabenick & Clemens Noda, 2004; Menken & Atunez, 2001; Reeves, 2006; U.S. Department of Education

NCES, 1997, 2001; Zehler et al., 2003; and see also Volume III of this report).

Mainstream Teachers of ELLs

- It is likely that a majority of teachers have at least one English language learner in their classroom.
- Only 29.5% of teachers with ELLs in their classes have the training to do so effectively.
- Only 20 states require that all teachers have training in working with ELLs.
- Less than 1/6th of colleges offering pre-service teacher preparation include training on working with ELLs.
- Only 26% of teachers have had training related to ELLs in their staff development programs.
- 57% of teachers believe they need more training in order to provide effective education for ELLs.

Recent estimates of the numbers of teachers who have participated in professional development in ELL education are difficult to identify. The most recent National Center for Education Statistics (NCES) *Schools and Staffing Survey* which has relevant data (U.S. Department of Education, NCES, 1997, data from 1993-94) reported that of those teachers who had ELLs in the classroom, only 29.5% received training in working with this population.

Twenty states currently require that new teachers have some ELL preparation. States' requirements vary considerably, with some peripherally mentioning ELLs in their standards for pre-service teachers, and others (Arizona, California, Florida, and New York) requiring specific coursework or separate certification on the needs of ELLs (see Volume III of this

report). In a survey of postsecondary institutions offering ELL teacher preparation, Menken & Atunez (2001, in conjunction with the American Association of Colleges for Teacher Education) found that less than one-sixth of all postsecondary institutes required ELL-oriented content in their preparation of mainstream teachers (Menken & Atunez 2001).

At the state and district levels, staff development opportunities for practicing teachers are similarly underrepresented. A 2001 NCES study of staff development reported that ELL

education was the least likely topic of focus (U.S. Department of Education, NCES, 2001). While 80% of those surveyed had participated in staff development that related to their state or district curriculum, only 26% had staff development relating to ELLs. Zehler et al. (2003) found that of teachers who had at least three ELLs in their classroom, 62% reported attending training related to ELLs within the past five years. However, the median amount of training was 4 hours.

Surveys of attitudes and feelings of preparedness indicate that teachers are uneasy with their lack of knowledge in this area. In the 2001 NCES survey, only 27% of teachers felt that they were “very well prepared” to meet the needs of ELLs, while 12% reported that they were “not at all prepared” (U.S. Department of Education, NCES, 2001). In a separate survey of over 1,200 teachers, 57% indicated that they needed more information to work effectively with ELLs (Alexander, Heaviside & Farris, 1999, p.10). In research conducted with 279 teachers in a school district with a minimal number of ELLs, Reeves (2006) found that 81.7% believed that they did not have adequate training to work effectively with ELLs, and 53% wanted more preparation. Given the steady increase in the ELL population it is safe to assume that a growing number of teachers see the need for—and feel the lack of—professional development.

Smaller scale attitudinal surveys of teachers have often focused on teacher attitudes toward and knowledge about ELLs as a proxy for preparedness, reasoning that if teachers do not have accurate information about the cultural, linguistic and learning characteristics of ELLs then they are not well prepared to teach them. Teachers of ELLs often hold beliefs that have either been disproven or are seriously contested.³ For example, Reeves (2006) found that 71.1% of teachers surveyed believed that ELLs should be able to learn English within two years. In a survey of 729 teachers in a school district in which almost one third of students were ELLs, Karabenick & Clemens Noda (2004) found that a majority (52%) believed that speaking one’s first language at home inhibited English language development. Nearly one-third (32%) thought that if students are not able to produce fluent English, they are also unable to comprehend it. The authors also reported that many mainstream teachers do not “distinguish between oral communication proficiencies and cognitive academic language capabilities” (p. 63). Several researchers, including those above (and see also Bartolomé, 2002; Lee & Oxelson, 2006; Phuntsog, 2001), have found that culturally sensitive and comprehensive training of educators leads to a shift in these attitudes toward ELLs.

Given the fact that the training of teachers lags behind the realities of the classroom, these misconceptions and feelings of unpreparedness are unsurprising. The recent increase in ELLs in U.S. classrooms has been rapid, and teacher education and professional development has not yet caught up with the demographic shift. There is a pressing need for education for teachers at all stages in their careers which aims to prepare or upgrade teachers’ knowledge and skills in order to close the achievement gap between linguistic minority students and their native English speaking peers.

³ There are a number of useful texts which provide counterevidence for these and other “myths” in a format accessible to mainstream teachers – see particularly Lightbown & Spada (2006, Ch. 7), McLaughlin (1993), and Samway & McKeon (1999).

2: Guide for Program Development

Because of both the changing demographics of America's schools and the disparity between the needs of ELLs and the knowledge and skills of their teachers, teacher education and professional development are critical for mainstream teachers of this underserved population. This section of the report focuses primarily on the structural components of teacher education and professional development, including modes of delivery, program design, and assessment and evaluation. The content of teacher education and professional development will be taken up in greater depth in the following chapter, *Guide for Mainstream Teachers of English Language Learners*. The material included in this section is a result of a review of the literature on ELL teacher education and professional development, and incorporates guidance and practical suggestions provided by our expert panelists. To achieve a high level of applicability, we have approached the topic through the lens of widely used standards. The first part of this section considers teacher education in the university setting, and takes as its starting point the National Council for the Accreditation of Teacher Education (NCATE) standards for teacher preparation. We present a set of suggestions, aligned with NCATE standards (NCATE, 2007),⁴ for incorporating issues regarding ELLs into postsecondary programs. The second part addresses ongoing state- and district-wide staff development for practitioners and presents suggestions aligned with the National Staff Development Council's (NSDC) standards (NSDC, 2001).

⁴ The current set of NCATE standards were ratified May 11, 2007, and come into effect in fall 2008.

University-based Teacher Education

Teacher education in postsecondary programs may be either pre-service or in-service.

Universities offering pre-service teacher education programs generally adhere to a state's requirements for licensure or certification. Although licensing requirements vary from state to state,⁵ certification programs generally cover the foundations of education, methods, and field or clinical experiences.

The content and learning experiences included in a typical pre-service program can be presented in a variety of formats, stretching from field-based learning completed largely in professional development schools to more traditional programs that offer a majority of coursework at the university. The programs can be offered at either the undergraduate or graduate levels, and can include a Bachelor's or Master's degree along with licensure.

In-service teacher education programs are offered at the graduate level and often lead to a Master's degree or doctorate. They have a variety of foci and include coursework that emphasizes subject matter, advanced teaching strategies, or both. A high school history teacher, for example, can enroll in a Master's program in history, secondary education, or any of a variety of sub-disciplines. In-service programs for elementary teachers can be subject-oriented graduate programs, or may focus on particular topics, such as advanced instructional strategies, or subpopulations of students, such as gifted and talented students, or ELLs.

This section addresses teacher education at the pre-service and in-service level jointly, and takes as a point of departure the NCATE standards for accreditation of teacher preparation programs (NCATE, 2007). The six NCATE standards are:

NCATE Standards Applied to ELLs

1. Teachers should acquire **pedagogical content knowledge** which addresses ELLs
2. Assessment and evaluation data should **measure** teachers' preparedness to work with ELLs
3. Field experiences should provide **practice** and opportunities to see successful teachers **model** effective techniques in working with ELLs
4. Candidates should understand the range in **diversity among ELLs**
5. & 6. Unit should provide **qualified faculty** and **sufficient resources** to support teachers' learning about ELLs

⁵ See Volume III of this report for a review of state licensure requirements.

Standard 1: Candidate Knowledge, Skills, and Dispositions
Standard 2: Assessment System and Unit Evaluation
Standard 3: Field Experiences and Clinical Practice
Standard 4: Diversity
Standard 5: Faculty Qualifications, Performance, and Development
Standard 6: Unit Governance and Resources

The six NCATE Standards (NCATE, 2007)

Standard 1: Candidate Knowledge, Skills, and Dispositions

The first of the NCATE standards concerns the knowledge, skills, and dispositions of teachers, including their content area knowledge, their pedagogical content knowledge, their knowledge of learning styles, strategies, and differences, and their professional dispositions. Critical to providing quality education for ELLs is an understanding that pedagogical content knowledge and knowledge of learning must encompass the skills and knowledge to engage English language learners with the content of the discipline. Although knowledge of learners may stay constant across disciplines, pedagogical content knowledge is highly discipline specific.

Teachers with effective pedagogical content knowledge know the relevant disciplinary standards, and know how to teach in ways that facilitate student learning of the standards. For teachers of classes which include ELLs, effective pedagogical content knowledge means knowing how to teach content and language simultaneously. Teachers must take into account not only disciplinary standards, but also TESOL's standards for English language proficiency (TESOL, 2006).

There are five TESOL PreK–12 English Language Proficiency standards. Standards 2–5 are explicitly framed by the four core subject areas. Cross-cutting the standards are the four domains of language competence (listening, speaking, reading, writing), five levels of English proficiency, and five grade level clusters (preK–K, 1–3, 4–5, 6–8, 9–12). Included in the standards documents are a set of sample performance indicators which provide examples for how to operationalize the standards using sample topics. More detailed information on integrating the standards, specific to 9–12 teachers, can be found in *Integrating the ESL Standards Into Classroom Practice: Grades 9–12* (TESOL, 2001). Teacher educators can also refer to TESOL's companion publication, *Implementing the ESL Standards for Pre-K-12 Students Through Teacher Education* (Snow, 2000).

TESOL's PreK–12 English Language Proficiency Standards

Standard 1: English language learners **communicate** for **social, intercultural, and instructional** purposes within the school setting.

Standard 2: English language learners **communicate** information, ideas, and concepts necessary for academic success in the area of **language arts**.

Standard 3: English language learners **communicate** information, ideas, and concepts necessary for academic success in the area of **mathematics**.

Standard 4: English language learners **communicate** information, ideas, and concepts necessary for academic success in the area of **science**.

Standard 5: English language learners **communicate** information, ideas, and concepts necessary for academic success in the area of **social studies**.

(TESOL, 2006, p.28)

Effective pedagogical content knowledge, then, requires teachers to know how to teach the content of their subject in ways which result in English language learners having the ability to communicate effectively within the discipline. Because pedagogical content knowledge is so discipline-specific, the skills of an effective math teacher will differ from the skills of an effective social studies teacher. Pedagogical content knowledge of relevance to each of the four core content areas is covered in more detail in Chapter 3.

Standard 2: Assessment System and Unit Evaluation

The second NCATE standard for teacher preparation programs calls for units to include an assessment system which collects, analyzes, and evaluates data on applicant qualifications, candidate and graduate performance, and unit operations, and to use these data for program improvement. Where possible, these data should be disaggregated in order that the assessment and evaluation component can be used to give a clear picture of the efficacy of the teacher preparation program in readying teachers to work with ELLs. Data for such purposes might include data on the linguistic diversity of faculty, of candidates, and of the students encountered by candidates in their field experiences. Any tracking which considers program graduates and student outcomes should also account for the outcomes of ELLs. These data should be used to improve the program structure and curricula. Finally, candidates should be assessed on their capacity to work with ELLs, including assessment of candidates during clinical practice.

Standard 3: Field Experiences and Clinical Practice

It is crucial that all teacher education candidates have opportunities to engage with English language learners during their preparation, since the chances are great that they will eventually teach in a linguistically diverse classroom. Candidates should have the chance both to practice pedagogical content knowledge techniques, and also for a great number of teachers, to interact with students whose cultural backgrounds and experiences differ from their own. Clinical practice which includes ELLs is recommended by NCATE (see “Diversity” below), and by Grant & Wong (2003). Abbate-Vaughn (2008) details an approach in which urban field



Process Writing In the Practicum

During a year-long field placement in a culturally and linguistically diverse urban school, pre-service teachers use process writing to reflect on changes in attitudes and dispositions.

What did the educators do? Pre-service teachers used process writing techniques to produce thesis projects for a Master’s degree. Successive drafts, as well as field notes and journals, were read and critiqued by peers and by university faculty. As the pre-service teachers progressed through the year, they reflected on the cultural biases in their early efforts.

“Sonia” began her year by focusing on what children and families were lacking.

Families like Analia’s struggle just to provide food for their children, which does not leave room for many material possessions. Many families live with relatives just to make ends meet. Some families are even unable to provide basic needs for their children, such as beds or clothing. On top of everything, these children are lacking what they need most, parental involvement.

As Sonia progressed through her practicum, she was challenged in many ways. Although Sonia’s classroom teacher-mentor tended to re-inforce the idea of a deficit in the family background of the children in the school, she also received feedback from other quarters. Sonia’s university professor encouraged her to reflect and write more critically on what it meant to be rich and poor. Sonia’s pre-service teacher colleague, “Holly,” herself from an immigrant family, acted as a critical reader who challenged some of Sonia’s biases.

At the end of the practicum year, Sonia had shifted her focus away from a deficit perception to more clearly seeing assets that children brought to the classroom and embracing her own responsibility in reaching out across cultures.

*Parents are involved in the education of their kids in ways teachers often do not see. Parents may not be able to help their kids with homework when too many jobs prevent them from even seeing their children. Some have parents available at home but who might not be yet fluent in English. As a result, students are faced with the hardships of poverty and language barriers, and therefore, **teachers must find new ways to reach them.***

Standards: Field Experience and Clinical Practice

(Abbate-Vaughn, 2008)

experiences with culturally and linguistically diverse students are integrated with pre-service coursework. Practica should be designed in conjunction with school partners so that pre-service teachers have the opportunity to interact with mentor teachers who are knowledgeable about ELLs. It is imperative that classroom practice experiences be carefully structured so they work to break down, rather than to reinforce, any negative stereotypes that candidates may bring to the table. Candidates should have opportunities to see veteran teachers model successful techniques in classrooms where ELLs are succeeding in learning, and are full participants in their learning communities. Finally, a well designed field experience should be the first step toward a teacher learning to be an effective member of a professional community.

Standard 4: Diversity

NCATE's diversity standard calls for attention to diversity to be built into the design, implementation, and evaluation of the preparation program, and for programs to demonstrate diversity among faculty and candidates. The standard explicitly requires that candidates work with English language learners during clinical practice. It is important furthermore that candidates understand that there is diversity *among* ELLs. English language learners are diverse along the dimensions of race, class, and cultural background. Teachers must also be prepared to teach students from diverse educational backgrounds. This is particularly true of immigrant ELLs. The standards, teaching practices and expectations of schooling that students have previously been exposed to may be quite different in kind from those found in American schools. Learning in school may be particularly challenging for those students whose formal education has been interrupted due to natural disaster, war, or other violent upheaval in their home country. Such students must not only adjust to new cultural conventions regarding teaching and learning, but may have significant traumatic experiences in their past to deal with.

Through the requirement of diversity among faculty and teacher candidates, this NCATE standard implies linguistic diversity. Linguistic diversity should ideally also be found among the school personnel the candidate works with during practicum experiences.

Standard 5: Faculty Qualifications, Performance, and Development & Standard 6: Unit Governance and Resources

Universities may approach the problem of educating candidates about English language learners in one of three ways. They may offer stand-alone classes focusing on the needs of ELLs, they may offer an "infused" curriculum in which each faculty member incorporates materials of relevance to ELLs into courses across the curriculum—or they may combine these approaches. In conjunction with either of these methods, faculty may co-teach classes with bilingual education or ESL specialists. The choice of approach is related both to faculty preparedness to teach infused courses (Standard 5) and also to the program's commitment of resources, personnel, and facilities (Standard 6). Both options have advantages. Stand-alone courses are easier to implement in that they do not require all faculty to have training in issues of relevance to English language learners; furthermore, several states mandate stand-alone courses (see Volume III of this report for details).

An advantage of infused courses is that candidates constantly attend to the needs of ELLs throughout their coursework. Such courses, however, require that all faculty are adequately prepared in ELL education. Research on faculty preparation is scant and somewhat preliminary. For the most part, this research focuses on the design and implementation of programs at individual universities. Despite the fact that no large-scale assessments are available, the research presented by Costa, McPhail, Smith and Brisk (2005), Meskill (2005), Brisk (2008), and Nevárez-La Torre, Sanford-DeShields, Soundy, Leonard and Woysner (2008) provides a promising start in this field. These resources describe professional development activities intended to prepare faculty to include attention to ELLs in their courses.

Professional Development for Practicing Teachers

Staff development at the state and local levels includes the education of teaching and other educational staff as a part of the ongoing professional development of practitioners. Perhaps the most widely-known standards in staff development have been produced by the National Staff Development Council (NSDC, 2001).

NSDC standards support long-term and continuous staff development and represent a departure from decontextualized workshops presented by external experts. They include a commitment to intellectually rigorous learning that enhances “the knowledge, skills, attitudes, and beliefs necessary to create high levels of learning for all students” (NSDC, 2001, p. 2). The standards include a strong focus on the critical analysis and interpretation of research and data by educators themselves, rather than a reliance on outside authorities. Central to the delivery of standards-based staff development is practitioners’ participation in collaborative action research. The NSDC standards are intended for teachers, principals, district and state level administrators, and paraprofessionals.

The standards are organized according to three categories – Context, Process and Content.

Context Standards	Process Standards	Content Standards
<i>Learning Communities</i> <i>Leadership</i> <i>Resources</i>	<i>Data-driven</i> <i>Evaluation</i> <i>Research-based</i> <i>Design</i> <i>Learning</i> <i>Collaboration</i>	<i>Equity</i> <i>Quality Teaching</i> <i>Family Involvement</i>

The NSDC standards for staff development (NSDC, 2001).

This section will address each of the NSDC standards and its relevance to ELL education.

Context Standards

Learning Communities

Staff development that improves the learning of all students organizes adults into learning communities whose goals are aligned with those of the school and district.

The NSDC standards define learning communities as “teams that meet on a regular basis ... for the purposes of learning, joint lesson planning, and problem solving” (NSDC, 2001 p. 8). Learning communities are recognized in the professional development literature as a powerful tool for improving the quality of teaching (Hord, 1997; Kruse, Louis, & Bryk, 1994; Newmann & Wehlage, 1995).

Learning communities of mainstream teachers can incorporate the needs of ELLs by inviting into their communities individuals with expertise in ELL education. Such individuals might include

ESOL or bilingual certified teachers, other bilingual educators with cultural background knowledge, district or state level personnel, university faculty, or outside researchers. Learning communities comprised of senior personnel such as principals and district-level administrators, and of university faculty learning to infuse their courses with an awareness of issues related to ELLs, offer benefits to both sets of stakeholders. For examples of learning communities made up of content area teachers collaborating with ELL experts, see Buck, Mast, Ehlers & Franklin (2005), Clair (1998) and Warren & Rosebery (1995).

NSDC Context Standards Applied to ELLs

- Professional learning communities for content area teachers should include **ELL experts**
- Educational leaders must **model responsibility** for ELL learning
- Schools and districts must assign **adequate resources** so teachers can learn how to **interpret data** and **access research** of relevance to ELLs

Leadership

Staff development that improves the learning of all students requires skillful school and district leaders who guide continuous instructional improvement.

It is not only teachers who must move away from the attitude that “it’s not my job” when working with ELLs. Successful professional development requires the vested participation of educational leaders at the state, district, and school levels. Department chairs exert valuable influence in the culture and practices of teachers. Principals, district administrators, SEA administrators, and policymakers and decision makers at all levels must also become aware of their responsibilities in providing quality teaching and learning for language minority students. (See Reyes (2006) and Suttmilller & González (2006) for background on the professional development of principals and other educational leaders.)

Resources

Staff development that improves the learning of all students requires resources to support adult learning and collaboration.

District-level resources include (i) human capital (including the relevant skills and knowledge within the district), (ii) fiscal resources, including time, and (iii) physical capital, including meeting space, access to technology, and access to classroom materials (McLaughlin et al., 2002). A commitment of resources to human capital might include supporting specialists to help teachers understand and interpret data related to ELLs, or arranging for conversations between experts in assessment and standards and classroom teachers. Districts must also allocate paid staff-hours to professional development to ensure success. Finally, district resources must account for providing space and computer access, and for allowing teachers access to research and other training materials of relevance to ELLs.

Process Standards

Data-driven

Staff development that improves the learning of all students uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement.

Both the planners of staff development and teachers in professional learning communities can benefit from data-driven staff development. Data of relevance include the numbers of ELLs in the classroom, school, or district. Also important are assessment data that address the performance of ELLs relative to the general population of students, to expected standards, and across time. Performance data can come from standardized tests, district-wide tests, student portfolios, AP enrollment, and high school graduation rates. In order that teachers can engage fully with these data, they need training on the sorts of data available to them and how to interpret it. They should know how students are classified as ELL or LEP within their system, and should understand the nuances of any assessments, including assessment accommodations. Professional learning communities should be empowered to collect, analyze, and interpret data as professional development unfolds, and to adjust their trajectory on the basis the results.



Strong Leadership Makes Space for Teacher Learning

At “Cedar Park Elementary,” located one mile from the U.S.–Mexico border, 51% of the students are ELLs. Cedar Park’s principal instituted an innovated scheduling plan so that teachers had time for extended meetings of their professional learning communities.

What did the educators do? Cedar Park’s principal, “Ms. Thomas,” has fostered a number of initiatives in her school to better meet the needs of the students. In order to make sure that classroom teachers had time to engage in professional learning activities, Ms. Thomas arranged the school schedule so that all of the children in the same grade level took their non-core classes, including, art, music, and physical education, at the same time. This left teachers free to meet for three-hour sessions every two weeks.

Ms. Thomas attends all of the teachers’ professional learning meetings. In the meetings, teachers discuss instructional strategies and ways to better align their curricula. They also pay attention to assessment beyond mandated standardized testing. Cedar Park’s assessment strategies are informed by Ms. Thomas’ assessment philosophy:

in order for assessment to be informative in evaluating student learning and improving curricular content, it must assess what students are taught, be relevant to students’ cultural and linguistic needs, and provide accurate and reliable data to assure that all students are learning.

Standards: Leadership, Collaboration, Data-driven

(Suttmiller & González, 2006)

Evaluation

Staff development that improves the learning of all students uses multiple sources of information to guide improvement and demonstrate its impact.

Evaluation of professional development programs serves two compelling purposes. Effective evaluation demonstrates to the policy or decision makers who are responsible for providing funding that professional development is working and should be continued. It also highlights successful program components which should be continued or replicated. There is a wealth of literature on the evaluation of professional development, much of which can be applied directly to ELL education. A particularly useful resource is Guskey (2000), which pinpoints five levels of evaluation of professional development: participants' reactions; participants' learning; organizational support and change; participants' use of new knowledge and skills; and student learning outcomes. For ELLs, the potential methods for collecting data on student learning outcomes are rich and varied, and connect directly with assessment methods.⁶

Research-based

Staff development that improves the learning of all students prepares educators to apply research to decision making.

As well as being data-driven, effective staff development must also be research-based. A strong foundation in the research on second language acquisition is essential for those who plan and implement staff development for content area teachers. Research is also an effective tool for teachers, and it can provide direction and impetus for professional learning communities to set effective agendas. Mainstream teachers, however, are far better served by engaging with research which is narrowly targeted toward their specialty than they are in attempting to replicate the knowledge of second language acquisition experts. An overemphasis on second language acquisition or on linguistics may in fact be counterproductive for mainstream teachers (Télez & Waxman, 2005). Rather, teachers should become acquainted with research that addresses learning the specific language of their discipline. There are, naturally, broad concepts which are of relevance to all teachers, such as an understanding that second language

NSDC Process Standards Applied to ELLs

- Staff development should be driven by accurate and relevant **data about ELLs**
- Evaluation of staff development should include data on **ELL outcomes**
- The research base of staff development should address **language skills for the content areas**
- Programs must be designed **specifically for each content area**
- Teachers' knowledge base should include the **learning styles of ELLs**
- Teachers should learn how to collaborate **across cultural boundaries**

⁶ For more on assessment, see p.39 below.

acquisition differs from first language acquisition; an understanding of the crucial differences between informal and academic English; and an understanding that all children bring “funds of knowledge” (Moll, Amanti, Neff & González, 2005) to the classroom. These concepts, however, will be more concrete and relevant to content area teachers if they are contextualized within each teacher’s area of expertise. (See particularly Faltis & Coulter (2008) and Richard-Amato & Snow (1992) for research on practice across the four core subjects, as well as the resources provided in the next chapter.)

Design

Staff development that improves the learning of all students uses learning strategies appropriate to the intended goal.

Perhaps the most important lesson for designers of professional development programs to internalize is that general education teachers are not ESOL teachers. Professional development designers who have expertise and background in ESOL or bilingual education need to ensure that they tailor staff development programs for learners who are experts in science, or language arts, or other spheres of general education. In a study of 1,027 science and mathematics teachers who participated in professional development activities, Garet, Porter, Desimone, Birman, & Yoon (2001) found that teachers who participated in professional development activities with a greater focus on pedagogical content skills were significantly more likely to feel that program had a beneficial effect on their knowledge and skills than did those who focused on general pedagogical knowledge. Teachers who felt that they had gained an increase in knowledge and skills, moreover, were also more likely to transfer this knowledge into changes in teaching practice. Similar results were found by Cohen & Hill (1998) and Kennedy (1998).

A second important design characteristic is coherence. Professional development which is aligned with the goals, standards, and assessments that teachers are already working with is more likely to increase teachers’ skills and knowledge, and more likely to result in change in teaching practice, than is professional development which is at odds with these aims (Garet, Porter, Desimone, Birman & Yoon, 2001). As well as targeting teachers’ knowledge of their content areas, then, effective professional development for English language learners must be aligned with disciplinary standards. A list of standards of professional associations can be found in Chapter 3, below.

Learning

Staff development that improves the learning of all students applies knowledge about human learning and change.

Research on the preparedness of mainstream teachers indicates that they hold a variety of misconceptions about how ELLs learn (see Chapter 1 for discussion). Effective professional development must address these misconceptions and provide all teachers with accurate and research-based knowledge about ways in which the learning of ELLs is both similar to and different from monolingual learners.

A popular myth holds that “good teaching” in general will enable ELLs to learn content and language. Studies by de Jong and Harper (de Jong & Harper, 2005; de Jong & Harper, 2008; Harper & de Jong, 2004) argue that this perspective renders ELLs and their specific learning needs invisible, and that such an approach does nothing to challenge misconceptions that teachers hold about second language acquisition. They propose three key aspects of ELL’s learning preferences that should be included in teachers’ knowledge bases. First, an understanding that second language acquisition is not identical to first language acquisition, and that second language acquisition does not emerge from immersion alone. Second, a knowledge that cultural differences may lead to different attitudes toward appropriate classroom behaviors, including cultural difference in norms of speaking to authority figures, eye contact norms, or self-promotion. Finally, they argue that teachers should have a sense of ELL diversity, along domains such as age, L1 literacy, and the complexity of students’ attitudes toward embracing a new language and culture.

Professional development standards (e.g. NSDC, 2001; Eisenhower Mathematics and Science Clearinghouse and Consortia Network, 2005) tend to maintain that teachers’ learning in professional development settings ought to mirror students’ learning, using the premise that teachers will teach material in ways similar to those in which they themselves were taught it. This approach is problematic when it comes to learning to teach ELLs, and is particularly problematic when the demographics of the teacher population is not reflective of the diversity of students. Effective professional development for ELLs must deliver content relevant to the learning strategies of ELLs, but the mode of delivery must be tailored to the learning strategies of content area teachers. Teachers can, however, role-play or simulate teaching methods that match ELLs’ learning styles.

Collaboration

Staff development that improves the learning of all students provides educators with the knowledge and skills to collaborate.

Recognizing that effective professional learning communities are not built overnight, the NSDC standards suggest that professional development should include instruction in “appropriate knowledge and skills regarding group processes to ensure various teams, committees, and departments within schools achieve their goals and provide satisfying and rewarding experiences for all participants” (NSDC, 2001). For teachers of ELLs, this instruction should also be attentive to the multicultural aspects of the groups these teachers will be working in. In addition, the very act of participating in a professional learning community can be a powerful tool for learning collaboration techniques. Clair (1998) comments that teachers in a study group became more adept at collaborative learning as they spent more time with colleagues. Initial forays into collaboration should ideally begin at the pre-service level during the clinical practice component of the training.

Content Standards

Equity

Staff development that improves the learning of all students prepares educators to understand and appreciate all students, create safe, orderly and supportive learning environments, and hold high expectations for their academic achievement.

The question of equity has been addressed somewhat above under NCATE’s “Standard 4: Diversity.” It is expected that as teachers progress through their professional careers, and have greater experience with and exposure to the diversity of cultural backgrounds in their classrooms, they will sharpen their skills in working with students from varied backgrounds. Research by de Jong and Harper (2008) suggests that effective teachers of ELLs should understand issues of bilingualism and biculturalism, the process of acculturation and bicultural identity development, the sociopolitical context of teaching ELLs, and, as stressed above, the diversity among English language learners.

Skilled teachers have strategies which enable them to address prejudices among their students. It is important that native English speaking and ELL students learn to work collaboratively across cultural differences. ELL students may encounter prejudicial attitudes which hinder their learning if the teacher does not facilitate successful group work in the classroom—or worse, they may feel that school is not a safe environment. A broad review of studies which address prejudice reduction and antiracist teaching strategies can be found in Banks (2004).

NSDC Content Standards Applied to ELLs

- Teachers should understand the **cultural backgrounds** of their students
- Teachers should acquire **pedagogical content knowledge**, including knowledge of accommodations and assessments, which addresses ELLs
- Teachers should know how to involve their students’ **families and communities** in education

Quality Teaching

Staff development that improves the learning of all students deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately.

Instructional strategies are addressed in depth in Chapter 3, below. As teachers move along the continuum of professional development, their pedagogical content knowledge should become broader and deeper, and so the kinds of instructional strategies presented in staff development programs should take into account the prior expertise of the staff involved.

Assessment is crucial not only because it provides the background data which drives professional development, but also because high-stakes assessment is becoming more and more prevalent across the curriculum. English language learners have typically performed worse than their native-English-speaking peers (see Chapter 1 for more information). Assessment instruments can be problematic in that in some cases the linguistic complexity of test questions means that rather than providing feedback on how well a student has learned academic content, the question instead is a linguistic barrier to students of low English proficiency. For more on assessment, including methods to level the assessment playing field, see Chapter 3.



Funds of Knowledge and Family Visits

“though teachers are trained to build on prior knowledge, they are given no guidelines for how to go about eliciting this knowledge”

Cathy Amanti, teacher-researcher

In Tucson, AZ, educators began to understand more about the knowledge that their students bring from home by participating in a very different kind of home visit.

What did the educators do? Teacher-researchers collaborated in ethnographic investigations of their students’ households. A collaborative group of four teachers and three researchers wanted to learn more about the background funds of knowledge that students from working class immigrant families bring to the classroom. In a typical home visit, teachers aim to educate parents. In this project, the aim was for the teachers to learn from the families.

Teachers visited families with an open-ended questionnaire and a tape-recorder, and asked questions about topics including family history, the parents’ work experiences, and their beliefs about raising children. They wrote field note journals and met with other teachers in the project to discuss what they were learning about their students’ families.

“As I read [my early journal entries] I realized that I had discussed my students in terms of low academics, home-life problems, alienation, and socioeconomic status, and that I was oriented toward a deficit model. I no longer see the families I visited that way. Since I am looking for resources, I am finding resources, and I recognize the members of the families for who they are and for their talents and unique personalities.”

Martha Floyd Tenery, teacher-researcher

Standards: Learning Communities, Research, Family Involvement

(Moll, Amanti, Neff & González, 2005; González et al., 2005)

Family Involvement

Staff development that improves the learning of all students provides educators with knowledge and skills to involve families and other stakeholders appropriately.

Involving families and the wider community in the educational process has a dual benefit for English language learners. First, it brings into the school community the parents of children who otherwise might be left out due to linguistic and cultural barriers. Second, it allows for teachers and students to integrate cultural and family knowledge directly into the curriculum.

High quality family involvement requires that educational leaders build structures which respond to the needs of immigrant and non-English speaking families, and that teachers know how to access these resources. Districts must make available resources such as translation and interpretation services, and teachers must be aware of and know how to use them.

Professional development for teachers that encompasses cultural knowledge enables the teacher to successfully build partnerships with parents. By understanding cultural norms regarding the respective roles of teachers and parents, teachers can work to involve parents who may feel, for example, that to approach a teacher about their child's performance is an inappropriate challenge to the authority of the teacher (see Atunéz (2000) for an outline of barriers to involvement for Hispanic parents with limited English proficiency and strategies teachers can use to overcome them).

Just as teachers may hold misconceptions regarding language acquisition, so may parents, and effective family involvement can help to reassure parents and dispel mistaken beliefs. Parents may believe, for instance, that speaking the native language at home will hamper their children's attempts to learn English. In fact, exploring the material learned in school in the home environment, in any language, allows children to consolidate the learning they receive in the school. An appreciation of literacy is especially valuable when it emerges from the home environment, and literacy skills learned in the home language have the potential to transfer into the second language and in fact may enhance learning literacy in English.

Teachers can also use participatory strategies to weave cultural and family knowledge into the curriculum in ways that are directly relevant to students' home and school life. Berriz (2002) explores a number of examples, including exercises that center around interviewing family and community members, as well as activities in which families are invited into the classroom to view student work. NSDC (2001) describes a school in which parents were frustrated with score-based report cards because they felt that they were not receiving adequate reports of higher-level thinking skills. In response, the school initiated staff development centered on portfolio assessments. When these alternative assessments were implemented, parents had the opportunity to come into the school and view students' portfolio work.

Summary

This section of the report has considered the structure and design of teacher education and professional development programs for mainstream teachers of ELLs. It incorporates guidelines for enhancing both teacher education in postsecondary settings as well as professional development for practicing teachers. These guidelines are aligned with existing standards.

Guidelines for providing teacher education which addresses the needs of ELLs have been presented using the framework of the NCATE standards. They call for attention to pedagogical content knowledge which recognizes ELLs' learning styles; program evaluation which measures teachers' knowledge and skills in working with ELLs; clinical practice experiences which include ELLs; fostering teacher candidates' understanding of the diversity among ELLs; and a sufficient commitment of financial and faculty resources to ensure that these components are feasible.

For practicing teachers, we present a set of guidelines aligned with the NSDC standards for professional development. The context for continuing staff development should be based in professional learning communities which include ELL experts, nurtured by educational leaders who model responsibility for ELLs, and supported by resources at the school, district, and state levels. The professional development process should be driven by accurate data concerning the numbers and performance of ELLs and by evaluation which takes this data into account. Programs should incorporate research which focuses on the language and communication skills required in the content areas, and should be designed with mainstream teachers in mind. An understanding of the learning styles of ELLs is key, as is professional development which fosters collaboration across cultural boundaries. Finally, the content of staff development programs should include strategies for involving the families of ELLs, for ensuring equity, and should have a strong focus on instructional strategies which result in ELLs meeting rigorous academic standards.

The next section of this report explores the question of instructional strategies and appropriate assessment and accommodations in greater depth. Included are four short stand-alone pieces that address specific instructional strategies for English language arts, social studies, science, and mathematics.

3: Guide for Mainstream Teachers of English Language Learners

This section of the report provides an overview of the key concepts related to educating ELLs, with the explicit intention of providing awareness and practical suggestions for teachers who have little or no experience with this population. Given the number of myths about language learning that exist, it is necessary that teachers develop a basic understanding of how language is learned and accordingly, the research-based practices that support that learning. The following topics are discussed in the following order:

1. language acquisition and communicative competence (the interplay of first and second acquisition, the second language acquisition process),
2. curriculum and instruction (coordinating standards, access to the subject matter content, differentiation, academic vocabulary and oral language, reading, writing, and technology),
3. content assessment (accommodations),
4. culture and education, and,
5. school and home communities.

Each category includes teacher performance criteria, which were compiled from recommendations from professional associations and refer to the tasks the teacher should be able to complete as a result of acquiring the accompanying knowledge. Guidelines for teachers in the subject areas of language arts, social studies, science, and math will follow the general guide.

Teacher knowledge can be described in terms of the acquisition of information and its application. For the purposes of this section these will be treated together. This expertise in teaching ELLs ranges on a continuum from novice to advanced, and includes university pre-service and in-service teachers seeking degrees and certificates as well as school-based in-service teachers (i.e., staff development). Drawing on Aida Walqui's (2001) definition of expertise that encompasses vision, motivation, knowledge, practice, context, and reflection, this section will focus on knowledge and practice.

Language Acquisition and Communicative Competence

The Interplay of First and Second Language Acquisition

Teacher Performance Criterion: *Teachers will be able to demonstrate the effective use of first language in the classroom.*

Acquiring a second language (L2) is fundamentally different than acquiring a first, since greater L2 immersion does not necessarily lead to increased acquisition. As a result, students should be able to use their first language in class to help aid comprehension (Verplaetse & Migliacci, 2008; Crawford & Krashen, 2007). For example, ELLs from the same language background might be grouped together to improve conceptual understanding. Because classes are conducted in

English, ELLs need to move from the native language to English as soon as their developmental abilities allow. In classes where there are single students from a specific language background, teachers can use wordless books (Cassady, 1998) or texts in those languages if available.

ELLs, unlike their native-speaking peers, must acquire a second language in addition to learning content knowledge. However, according to Cummins (1994) and Collier (1994), concepts and skills learned in one's first language will transfer to one's second language. The words to describe them need only be learned. Similarly, literacy skills in one's native language help with literacy in a second language (Verplaetse & Migliacci, 2008; Crawford & Krashen, 2007).

Second Language Acquisition Process

Teacher Performance Criterion: Teachers will be able to recognize the signs of progressing second language acquisition.

Many factors affect the second language acquisition process, including socio-economic background, motivation, personality, and willingness to make mistakes (Lightbown & Spada, 2006).

Socio-economic status (SES) affects a student's basic needs, such as shelter, nutrition, and learning materials at home. Students of low SES tend to be especially prevalent among ELLs; accordingly, teachers should be sensitive to all the factors that might be affecting their students' performance.

During the process, teachers can expect students to speak and write in ungrammatical ways, often referred to as *interlanguage*, that still communicate a message (Telléz & Waxman, 2005). Interlanguage has some traits of the student's native language, some traits of English, and some general errors common to many second language learners (Lightbown & Spada, 2006). For example, a student might say, "How much the beaker hold?" instead of "How much does the beaker hold?" Above all, teachers should encourage communicative competence, which focuses on the goal of communication and production rather than the correction of every mistake. From the outset, ELLs experience corrections or ridicule which, to different degrees, discourages participation in English and inhibits their progress. Also, the skill of listening often develops before the productive skill of speaking, so students may be silent for an extended period (Díaz-Rico, 2008; Crawford & Krashen, 2007).

In addition, invented spelling, which refers to spelling phonetically (i.e., spelling *teacher* "techr"), is common in developing a language. In fact, it demonstrates that students are learning certain rules and are closer to approaching actual spelling.

Language Acquisition and Communicative Competence

- Teachers will be able to demonstrate the effective use of first language in the classroom
- Teachers will be able to recognize the signs of progressing second language acquisition.

In some cases, although students may seem to speak English well, they may be lacking the academic language to perform well in school. As noted often in the literature, there is a difference between conversational language and academic language. For example, asking about a friend's family requires different language skills than discussing global warming.

Curriculum and Instruction

Coordinating Standards through Teacher Collaboration

Teacher Performance Criterion: *Through professional collaboration, teachers will be able to coordinate their content standards with English language standards to develop appropriate learning objectives.*

By working with ESOL and other staff members, teachers should be able to coordinate content standards with English language standards to develop relevant learning objectives. For example, a content objective for science might be: "Students will be able to identify a variety of adaptations among animals." The language objective might be: "Students will be able to write simple sentences describing animals."

The ESOL or bilingual education specialists should provide key information regarding language to the content teachers and other participants of professional learning communities. For example,

Standards in ESOL and the disciplines can be found at:

Teachers of English to Speakers of Other Languages (2006). *PreK-12 English Language Proficiency Standards*.

http://www.tesol.org/s_tesol/sec_document.asp?CID=1186&DID=5349

National Council of Teachers of English. (1996). *Guidelines for the preparation of teachers of English language arts*. Urbana, IL: Author.

<http://www.ncte.org/groups/cee/links/126867.htm>

National Council for the Social Studies. (2000). *National standards for social studies teachers*. Silver Spring, MD: Author.

<http://www.socialstudies.org/teacherstandards/>

National Research Council. (1996). *National science education standards*. Washington, DC: National Academy Press.

<http://www.nap.edu/readingroom/books/nse/>

National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Reston, VA: Author.

<http://standards.nctm.org/>

cognates, which are words that have a common origin, can often be helpful to students who are learning English. Often, these words will have a common meaning, spelling, and pronunciation, which can be helpful for ELLs. In fact, some multisyllabic words in English are cognates of Greek and Latin, so speakers of Romance languages may recognize their forms and meanings (Walqui & DeFazio, 2003). For example, Spanish-speaking students who know *comunidad* is the

same concept as *community*, are quickly able to augment their vocabularies. Approximately “30-40% of all words in English have a related word in Spanish.” (Colorín Colorado, 2007). However, students who are learning to read in English first and not Spanish may not notice the similarities in cognates because of the orthographic differences between the words (Hiebert & Lubliner, forthcoming.) Also, sometimes there are words that sound similar between languages but are actually false cognates like Spanish *embarazada*, which means *pregnant*, not *embarrassed*.

Access to the Subject Matter Content

Teacher Performance Criterion: *Teachers will be able to routinely use effective, research-based methods to teach ELLs while contextualizing the content in meaningful ways.*

Since understanding directions is often difficult for ELLs, teachers can institute routines that enable students to experience greater success and academic independence. In addition, by modeling students’ tasks, teachers contribute to improved comprehension and performance. Research supports teachers using graphic organizers (i.e., T-charts, brainstorming webs) when appropriate or visual representation in addition to verbal explanations to enhance the material (Verplaetse & Migliacci, 2008). Graphic organizers have three functions: generative as students fill in the organizer, representative, as they scaffold content understanding, and evaluative, as teachers are able to assess students’ understanding (Díaz-Rico, 2008). Real objects or events should be incorporated into the lesson to provide a concrete context for words and ideas. In addition, teachers should vary the style and medium of communication whenever possible. Spoken directions should also be written, for example, and gestures should accompany oral language.

One of the most widely-accepted and used models that incorporates scaffolds for ELLs is called the Sheltered Instruction Observation Protocol (SIOP) (Echevarria & Short, 1999). SIOP relies on careful lesson preparation that starts with building background knowledge and providing comprehensible input, while also incorporating strategies, interaction, practice and application, and assessment (Echevarria & Short, 1999). If the students do not have experience or background knowledge, the teacher can create an activity that provides that experience. In other words, the teacher should scaffold the material for ELLs by drawing on background knowledge or creating a shared experience for the students that expresses an enduring understanding of the lesson (Echevarria & Short, 1999). The purpose of this scaffolded approach is to take the students from preparation to engagement with rich activities, and finally to extension, or further applications. Rather than over-simplifying the material, teachers should focus on amplifying the lesson to provide for richer learning experiences so students are working with adapted text but still learning grade level content (Walqui & DeFazio, 2003; see page 37 for examples).

Curriculum and Instruction

- Through professional collaboration, teachers will be able to coordinate their content standards with English language standards to develop appropriate learning objectives.
- Teachers will be able to routinely use effective, research-based methods to teach ELLs while contextualizing the content in meaningful ways.
- Teachers will be able to increase student engagement by identifying language challenges in a text, differentiating material, and grouping students in purposeful and meaningful ways.
- Teachers will be able to explicitly teach academic vocabulary in context and provide ample opportunity for students to use these words, leading to mastery.

Differentiation

Teacher Performance Criterion: Teachers will be able to increase student engagement by identifying language challenges in a text, differentiating material, and grouping students in purposeful and meaningful ways.

Regardless of whether the class is majority mainstream students or ELLs, there will inevitably be a variety of language abilities represented. Therefore, the teacher should be able to differentiate content instruction based on language proficiency. To use the previous example from a science class, a teacher could vary the same content on animal adaptation through texts written at different reading levels. Some publishers such as National Geographic provide units with coordinated books at different levels. Alternatively, a teacher could adapt sentences and vocabulary to the extent necessary while still being authentic to the content. Teachers should also illustrate the differences representative of writing in their subject area. For instance, writing a lab report in science requires a different format and style than a narrative essay in language arts.

Pair work is a very effective organization strategy that enables peers to assist each other (Gersten et al., 2007). For example, instead of a teacher directing students to take turns reading aloud as a class, each student has many more opportunities to practice reading when paired with a partner. In addition to dramatically increasing the practice time, paired reading improves motivation and accountability (Calderón, 2007). According to some research, students of varied language proficiencies can be grouped together (Gersten et

al., 2007). According to other researchers, students should be paired carefully so that high and low level English students are not paired together. Rather, teachers should pair high level students with medium level students or medium level students with low level students (Kinsella, 2008). In addition to collaborating with classmates, students should have the opportunity for independent practice, processing, and reflection on their own learning.

Academic Vocabulary and Oral Language

Teacher Performance Criterion: Teachers will be able to explicitly teach academic vocabulary in context and provide ample opportunity for students to use these words, leading to mastery.

Gersten et al. (2007) recommend that teachers develop students' academic language to promote their success in literacy and English language acquisition. "Academic language refers to the decontextualized, cognitively challenging language used not only in school, but also in business, politics, science, and journalism, and so forth. In the classroom, it means the ability to understand story problems, write book reports, and read complex ... texts" (Crawford & Krashen, 2007, p. 17). In writing, academic language is necessary to be able to construct topic sentences, use transitions effectively, and edit (Gersten et al, 2007). Furthermore, academic language acquisition involves more than just the understanding of content area vocabulary. It includes cognitively challenging skills such as explaining, comparing, contrasting, classifying, reporting, synthesizing, evaluating, and inferring. Academic language tasks occur in a context different from students' familial context, especially as grade level increases. According to Verplaetse and Migliacci, "Academic language as compared to social, interpersonal language treats the speaker and receiver as if they are distanced from one another; it has been called the *language of strangers* ... It assumes a lack of shared history, it limits opportunities for negotiation of meaning, and it uses words rather than visuals to convey most of its meaning" (2008, p. 128). To further complicate matters, new ideas and concepts are presented to the students through the decontextualized language.

One way to help students access academic vocabulary is to teach strategies such as guessing a word's meaning from the context or using word prefixes, roots, and suffixes to help arrive at a word's meaning (Nation & Waring, 1997).

To assist students in expressing themselves in an academic context, the teachers can provide sentence starters that incorporate academic vocabulary (For an example of sentence starters in a science laboratory, report, see the section on science, pp. 48-50). The sentence starters should be used for writing and also for oral language, to provide multiple opportunities for reinforcing the new vocabulary (Kinsella, 2008). In addition, teachers should model grammatical structures that allow students to complete the sentence starters appropriately. If the teachers have knowledge of grammar, they can explain the form required. For example, in a sentence that starts, "To combat global warming, the President should..." a teacher can point out that the verb the students should use needs to be in the base or infinitive form without "to". The students will benefit from instruction in the following academic language tasks: expressing an opinion, asking for clarification, soliciting a response, reporting a group's or partner's idea, disagreeing, affirming, predicting, paraphrasing, acknowledging ideas, offering a suggestion, or holding the floor (Kinsella, 2008). Students' ability to acquire and use academic vocabulary will directly affect their success in expressing themselves and accessing and analyzing text. Other options include creating a "shared history" by incorporating visuals, real objects, gestures, and occasions for students to clarify meaning (Verplaetse & Migliacci, 2008).

In terms of accessing teachers' spoken academic language, the research is divided. Some researchers support teachers making content comprehensible by speaking at a slower pace or

with exaggerated enunciation (Reyes & Vallone, 2008). In addition, they suggest that teachers adjust their spoken language by using simpler vocabulary words or grammatically uncomplicated sentences that match or are slightly higher than students' ability to comprehend oral language (Reyes & Vallone, 2008). Other teacher educators recommend that teachers should maintain an authentic pace and tone, but increase the number of pauses in their spoken language to allow time for comprehension (Verplaetse & Migliacci, 2008). At the same time, other researchers believe that simplifying or otherwise adapting language provides inadequate input for ELLs (Walqui & DeFazio, 2003). Gersten et al. agree, stating, "the problem with regularly giving English learners a diet of familiar reading material is that the academic texts of assessments and most content areas remain unfamiliar" (2007, p. 19).

Teachers should explain to their students that native language(s) can be used in the classroom. For example, students might use their native languages to demonstrate what they know. If the teacher doesn't speak the student's language, often there is another student from the same language background who may be able to translate.

In order for vocabulary instruction to be effective, words should be taught in context with sufficient time for rehearsal. A student is much less likely to remember a list of arbitrary vocabulary words than words that are taken from a chapter that they are reading, writing about and discussing in class. In learning a new word, a student must hear it, say it, be able to use it in a sentence, and notice something about it (i.e., prefix, cognate, part of speech, etc.). Repetition is essential, but always should be contextualized in meaningful ways. Because these words are pulled from the current unit, they will tend to be recycled and repeated naturally.

Most content teachers will be teaching advanced words, which are often concepts that are bolded in a textbook and link directly to the content standard (i.e., *mitosis*). However, ELLs often cannot access the content words because they need explicit instruction in other vocabulary. What further complicates the issue is that the supporting words often have homophones or different meanings across disciplines (Calderón, 2007). For example, consider the meaning of *radical* in math versus history or knowing the word *sign* and being confused when hearing *sine* in math class. Therefore, on a regular basis, teachers across disciplines should explicitly teach content-specific vocabulary as well as academic vocabulary that may be used across disciplines (Calderón, 2007).

Reading

Teacher Performance Criterion: Teachers will be able to demonstrate and monitor effective reading strategies.

Teacher Performance Criterion: Teachers will be able to identify texts that amplify rather than simplify language to facilitate ELLs' reading comprehension.

Teachers should be aware that some ELLs will not be literate in their first language, and thus need to learn the basics of the process of reading in addition to learning the language. The school's reading specialist should work with all students with low literacy, whether they are mainstream students or long-term ELLs, in addition to collaborating with those students' teachers.

For those students who are literate in their first language, the process of learning to read in English will be easier. Much of the skills learned in reading in one's first language can be applied to reading in a second language, depending on the similarity of one's first and second language (Francis, 2006, Book III). However, students who are literate in another language might have learned conventions that vary from English. For example, while English is read left to right and uses an alphabetic system, many world languages do not follow these patterns. Also, while some languages may have words with shared origins (cognates), other languages may not. For example, English and Spanish share many of the same Latin roots, but English and Chinese do not even share the same alphabet. Teachers also need to be aware of the different genres of writing in their disciplines to call their students' attention to those unique features before students read.

Teachers should remember that ELLs can start to read before they are proficient in oral language (Peregoy & Boyle, 2005). In cultivating reading skills, teachers should develop students' decoding skills through phonological awareness and phonics. ESL and reading specialists can assist content teachers in this area. In addition, the Institute of Education Science's What Works Clearinghouse features a review of research on the reading development of ELLs (2007). The highest-rated method is "Instructional Conversations," which are discussions completed in small groups under the guidance of the teacher, who focuses the topics on essential understandings in the reading and personal experiences. The next highest rated method is "Reading Mastery," which includes two programs that are available for either grades K-3 or grades K-6 ("Reading Mastery Plus"). The interactive program focuses on phonemic awareness, teaching students to

Curriculum and Instruction: Literacy and Technology

- Teachers will be able to demonstrate and monitor effective reading strategies.
- Teachers will be able to identify texts that amplify rather than simplify language to facilitate ELLs' reading comprehension.
- Teachers will be able to demonstrate and monitor effective writing strategies.
- Teachers will be able to identify appropriate technology to support learning.

associate sounds and letters, and continues into reading comprehension skills that include vocabulary development.

To avoid frustration, readings in which students are familiar with 90-95% of the vocabulary should be chosen (Calderón, 2007). In addition, independent reading should be “structured and purposeful” if it is to be beneficial (Francis, 2006, Book 1).

Students must learn and implement the strategies of good readers, such as predicting, monitoring for understanding, asking questions during reading, and summarizing after reading (Francis, 2006, Book 1). Students may be expected to demonstrate further literacy skills as defined by the state’s standards. While some states have adopted the World-Class Instructional Design and Assessment (WIDA) Consortium’s English Language Proficiency Standards, many have their own standards of learning (Gottlieb, Cranley, & Oliver, 2007).

In selecting reading materials, teachers should use the following mantra: “amplify not simplify” (Walqui, 2003). Simplifying the text generally refers to shortening sentences and deleting irregular forms, which makes the text less authentic and actually makes clarifying the meaning more difficult. However, a text that amplifies uses more explicit language with redundancies that draws on real, rich discourse. Accordingly, the amplified version will give the ELLs more opportunities to understand the reading passage. It is important for comprehension purposes that tangential information is eliminated. Texts for ELLs should be chosen or altered by teachers so that they limit technical terms and avoid clauses with distracting information, but insure that the material is authentic. Language that has been simplified for the sake of simplification actually hinders ELLs’ progress because there are fewer clues as to the meaning and worse, the text is not representative of how language is actually used.



Amplify, Don't Simplify

Original Text:

A second-generation American, César Chávez was born on March 31, 1927, on a small farm near Yuma, Arizona. At age 10, he and his family became migrant farm workers after losing their farm in the Great Depression.

Simplified Text:

César Chávez was a second-generation American. He was born on March 31, 1927, on a small farm near Yuma, Arizona. His family lost their farm in the Great Depression. He was 10 years old. They became migrant farm workers.

Amplified Text:

A second-generation American, **whose parents emigrated from Mexico**, César Chávez was born on March 31, 1927, on a small farm near Yuma, Arizona. At age 10, he and his family became migrant farm workers, **moving around to find work**, after losing their farm in the Great Depression (**a time of economic difficulty, 1929-1939**).

Text adapted from National Chavez Center (n.d.).

In addition, Gersten, et al. (2007) recommend that all students, including ELLs, be screened for reading problems and monitored through formative assessments. When the screening results are compiled, an instructor can hold “intensive, small-group reading interventions,” which consist of three to six students and can focus on those with weak reading skills (Gersten, et al., 2007, p. 10).

Writing

Teacher Performance Criterion: *Teachers will be able to demonstrate and monitor effective writing strategies.*

Effective writing requires mastery on both the micro and macro level; while students must think about spelling and choosing precise words, they must also be mindful of overall organization of ideas. If the students have learned how to write in another country, they may organize their ideas differently and/or use a less direct argumentation style than is typical of the American academic context (Fox, 1994). Teachers should also be aware of the differences between the writing styles of different genres. Since learners’ expectations affect their ability to perform in English (Walqui & DeFazio, 2003), teachers should highlight their disciplines’ unique features. “For example, in American history, this might include period rhetoric and referents such as the Constitution; in science it might include the ways that conclusions are stated; and in literature, it might include the routine phrases that indicate a fairy tale is in process” (Walqui & DeFazio, 2003, p.5). For low-literacy students, teachers should begin by focusing on the meaning of the writing, then move on to mechanics as their writing progresses (Barron & DiCerbo, 2006).

The following teaching methods of writing have demonstrated positive effect sizes. They are presented in order from most to least effective.

1. summarization,
 2. collaborative writing,
 3. specific product goals,
 4. word processing,
 5. sentence combining (rather than de-contextualized grammar exercises),
 6. pre-writing, inquiry activities, process writing,
 7. studying models, and,
 8. writing for content area learning
- (Graham & Perin, 2007)

In addition, ELLs must learn explicit strategies on how to write, depending on the type of text (Calderón, 2007). Students should be exposed to the various genres of writing used in schooling such as procedural and historical recounts, reports, persuasive writing and others (Schlepppegrell, 2004). Writing is essential in a reading curriculum because it doubles as an assessment of reading comprehension.

Brisk, Horan, & Macdonald (2008) recommend the rhetorical approach as an effective instructional strategy for developing ELLs’ writing skills, which consists of the following steps:

1. explore a general topic;
 2. define the purpose and audience;
 3. select subtopics;
 4. select the genre and appropriate organizational structure;
 5. select information;
 6. order examples and details,
 7. write a draft;
 8. revise and edit; and,
 9. prepare a final copy
- (Brisk, Horan & Macdonald 2008, p. 18).

Teachers should also provide feedback and explicit grammar instruction to support ELLs' writing, especially at the secondary level (Scarcella, OELA Summit, 2005).

Technology

Teacher Performance Criterion: *Teachers will be able to identify appropriate technology to support learning.*

As with most students, technology can be used effectively with ELLs because it tends to increase engagement. In addition, technology often provides a visual or audio component that expands context while also addressing different learning styles. Finally, incorporating technology also develops computer literacy for ELLs. The classroom should be managed so that ELLs can gain access to technology, especially in group projects with mixed levels or native speakers. For example, by assigning roles to students in groups, ELLs will be much more involved in using the technology in the process of completing the project.

Díaz-Rico (2008) recommends incorporating Internet technologies into the curriculum, either through e-mail listservs, blogs, or online discussion boards where the teacher can ask questions, recommend resources, and evaluate students' online responses as part of their grades. The Internet is an endless source of videos and digital tutorials that can be incorporated into a lesson plan, and videoconferencing with classrooms in other countries can be compelling for ELLs. In addition, students can complete assignments using particular applications, such as Microsoft Word, Excel, Publisher, and Powerpoint or use software that includes a listening and/or speaking component to develop oral language.

Content Assessment

Teacher Performance Criterion: *Teachers will be able to select assessments that test content or design statistically valid and reliable assessments that assess content mastery while students are learning English.*

There are many ways to assess ELLs, but generally a single multiple choice test fails to

Content Assessment

- Teachers will be able to select assessments that test content or design statistically valid and reliable assessments that assess content mastery while students are learning English.

accurately describe a student's mastery of content. In part, this is due to the language involved. In these cases, the assessments do not measure students' knowledge of content. Alternative assessment, such as a portfolio with sample work, allows students to demonstrate content knowledge using materials at the individual student's independent reading level, thus accommodating for the students' English proficiency. Instead of relying on one test format that is only indicative of a small representation of that student's ability, teachers should consider a wider sample of work (Díaz-Rico, 2008; Crawford & Krashen, 2007). In addition, teachers should be aware of cultural and linguistic biases on high-stakes tests. They can review the results to look for evidence of misunderstanding patterns, which can be used to inform instruction.

Accommodations

Accommodations describe alterations in the testing environment that adjust for a certain factor, such as a student being a second language learner. There are many types of accommodations and varied results on their effectiveness. Francis (Book III, 2006) found that the most substantial positive effect was gained when ELLs were provided with English language dictionaries. Notably, bilingual dictionaries were not as helpful, possibly because the instruction was only in English. Simplified English did not demonstrate a significant effect size. The study, however, was limited by its small sample size. Spanish versions of assessments, extra time and dual language tests were not statistically significant. A different perspective is offered by Shohamy (2001), who argues that bilingual tests should be considered applications of democratic principles rather than accommodations, since they represent regular processing for bilingual students.

A study by Abedi, Courtner, Mirocha, Leon & Goldberg (2005) suggested that some accommodation strategies increased ELL performance, although the results varied across grade levels. For instance, in grade 4, the dictionary was more effective while linguistic modification was more helpful for grade 8 ELLs. In keeping with a true accommodation, the strategies did not affect the performance of the general student population.

Since the research is not definitive, teachers should carefully analyze the accommodations that are successful in their classes and use (or recommend) them for high-stakes settings as well. Consistency and comfort level are important—for example, if students are not familiar with using dictionaries, providing them during a test may actually be counterproductive.

Culture and Education

- Teachers will be able to interpret student behavior in light of different cultural beliefs.

Culture and Education

Teacher Performance Criterion: Teachers will be able to interpret student behavior in light of different cultural beliefs.

Cultural differences can appear in a variety of nonverbal modes, such as body language, gestures, facial expressions, eye contact, and distance between speakers, as well as through cultural norms for verbal communication regarding silence,

questions, and discourse styles (Díaz-Rico, 2008). Further, ELLs have a range of prior schooling experiences that range from none to intermittent to world-class.

Often, the academic context ELLs are familiar with is vastly different than that found in the U.S., which is primarily a reflection of American culture. For example, some international students feel that making direct eye contact with a teacher is a demonstration of disrespect, while American teachers might interpret a lack of eye contact as a display of disobedience or guilt. Also, in some countries, students believe the teacher is the ultimate authority and may not feel comfortable asking questions. Teachers should be aware of this possibility and other cultural differences in interaction and be willing to discuss them and adapt accordingly. Díaz-Rico (2008) suggests that before teachers can implement research-based practices in cultural inclusion, they need to reflect on their own cultural values. She extensively describes ways a teacher can accommodate a variety of cultures, whether it be through a recognition of different concepts of time, dress code, school rituals, or other values. In addition, Reyes and Vallone (2008) suggest that teachers complete informal research on unfamiliar cultural practices by interviewing colleagues or bilingual parents and adapt instruction accordingly. Then teachers can use language, examples, artifacts, and community resources that are relevant to the students' cultures to validate their heritage and make the lesson more applicable to their lives.

Finally, a number of ELLs have had their formal schooling interrupted, which presents another challenge for teachers. Students who have missed significant time in school, whether in the U.S. or abroad, may not be aware of the conventions for school behavior. Teachers should remember, however, that these students' lack of knowledge does not equate to a lack of cognitive capacity or intelligence.

School and Home Communities

Teacher Performance Criterion: *Teachers will be able to compile community resources and be aware of translation efforts for school-home communication.*

Teachers should be sensitive to cultural differences in working with ELLs' families. If the parents and/or relatives of an ELL are unable to speak English as well as the child it is difficult for them to help with homework or be involved in the school community. However, parents can participate more actively if notices are sent home in their language, or if the district endorses an organization where they can meet to discuss school issues. (i.e., Hispanic Parent Teacher Association). Teachers can become aware of the resources available at the school and district level for ELLs and their families, such as translation services or hotlines for parents who speak a specific language. In addition, teachers can encourage parents to read to their children in the home language and conduct exploratory activities in the home language to increase cognitive development (Díaz-Rico, 2008). (For more information on this topic, see the section on Family Involvement in the previous chapter, pp. 26-27.)

School and Home Communities

- Teachers will be able to compile community resources and be aware of translation efforts for school-home communication.

Summary

The ideas described above are offered as a practical guide, with no expectation that mainstream teachers will adopt all of them. As noted in several categories, mainstream teachers are advised to collaborate with their ESOL and bilingual education colleagues to provide the best instruction possible for ELLs. The remainder of this section offers practical suggestions organized around the four core subject areas: English language arts, social studies, science, and mathematics.

English Language Arts

The National Council of Teachers of English (NCTE) propose that English language arts teachers be able to:

Illustrate the close relationship between how home language, native language, dialect, and a second language are acquired, developed, and utilized in the classroom and can articulate the importance, therefore, of helping students strengthen their language abilities through the provision of developmentally suitable experiences throughout their schooling (NCTE, 2006, p.24).

Vocabulary

Many classrooms with ELLs increase visual input by creating a Word Wall, or a section of the wall that includes key content vocabulary and/or concepts. Word Walls can be used in different ways; they might be used to demonstrate relationships between word forms (*hero, heroine, heroism, heroic*) or between characters and character traits in a novel.

As is common in other content areas, English Language Arts employs vocabulary that has multiple meanings in various contexts, and even across disciplines, like *article, body, character, novel, play, and problem* (Calderón, 2007). Some cognates to indicate for ELLs in teaching language arts include:

English-Spanish Cognates

irony	ironía	hyperbole	hipérbola	conflict	conflicto
hero	heroe	fable	fibula	anecdote	anécdota
fiction	ficción	comedy	comedia	protagonist	protagonista

Oral Language in Language Arts

In creating a learner-centered classroom, students have more opportunities to practice speaking and listening. As a result, they are more engaged while also being accountable. A popular strategy is literature circles, in which students become “experts” on the target work by assuming different roles. For example, in a group of four, one student might focus on summarizing, another on vocabulary from the chapter, another on theme, and another on notable quotes. Then students interact with each other to fill in the other three focused areas, a type of reciprocal teaching which provides opportunities for ELLs to clarify meaning if necessary.

Reader’s Theater is an effective method to work on students’ oral language development. For example, as part of a unit on folktales, a teacher might select a script that reflects the cultural background of students. Scripts are rife with opportunities to work on reading aloud—for example, stage directions (which consist of emotional adverbs to inform vocal inflection)—and to notice genre-specific features (character roles on the left and absence of quotation marks).

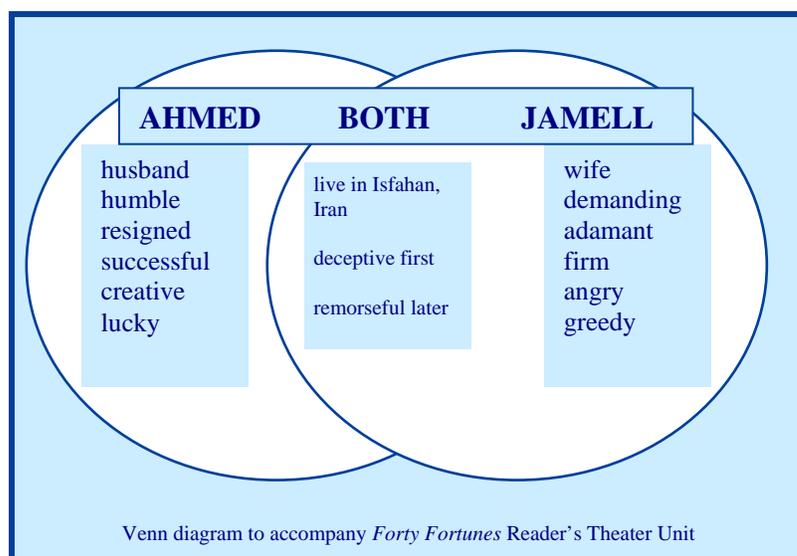
Accessing the Literature

A frequent problem with mainstream resources for ELLs is that they often marginalize the students by not depicting their lives or culture. When teachers use materials that mirror the populations they serve, students can connect with the texts in a meaningful way, and reflect on

their own lives in relation to the reading. Also, teachers can encourage students to choose what they read, since that increases student motivation. However, to insure that the reading level of the text is appropriate, the teacher should coach the students to read one page and if there are more than five words they don't know, they should choose another reading to avoid frustration.

For ELLs to access the novels, poems, or plays being used in class, they need graphic organizers or other types of anticipation guides with key vocabulary or reading strategies before they read the authentic text. A timeline of events in a chapter of a novel, for example, can provide the key points to the students before they wrestle with the actual text. They also should be taught the skills of good readers, such as predicting, re-reading, questioning, and summarizing. Teachers can teach students to use post-it notes in their textbooks, allowing them to react to the text by using a key of symbols for students to use in reacting to the text.

A Venn Diagram can be used to represent characters' similarities and differences or used as a way to brainstorm ideas before writing a compare-contrast essay. Another possibility is a listening guide or concept map with key concepts from the class lecture to be listed in a chart, which can be filled out to the appropriate level of instructional support for the student, and leaves gaps for the students to fill in as they listen.



Writing in Language Arts

Wordless books, which cover a range of topics appropriate for all ages, allow ELL students to integrate writing and reading skills. A student can access the text visually and learn about plot structure, focus on details, or work on predicting, which is a documented trait of good readers. If the students have literacy skills in their home languages, they can write the text to the wordless book, and as they progress add the English translation. Also, many students have difficulty with visualizing a story, so an activity that asks students to draw the main character can help cultivate imagination.

For students who have little or no literacy in either their first or second language, teachers can use the Language Experience Approach, in which students narrate a shared experience (i.e., field trip) they have had while the teacher writes down the story, modeling conventions of writing. For more advanced students, many teachers use journals or online blogs to have students respond to literature, thus integrating reading and writing skills, a constant practice in school.

To Learn More about Teaching Language Arts to ELLs

Web Resources

Aaron Shephard's Web site includes Reader's Theater scripts from a wide range of cultures, including *Forty Fortunes*. <http://www.aaronshp.com/rt/RTE.html#24>

Carroll, P.S. & Hasson, D.J. (2004). Helping ELLs look at stories through literary lenses. *Voices from the Middle*, 11(4). Retrieved May 5, 2008 from http://elearning.ncte.org/section/content/Default.asp?WCI=pgDisplay&WCU=CRSCNT&ENTRY_ID=3F245A2714164520B2F9F65428CEDEC7.

Mary Ellen Dakin's "Hamlet" for English Language Learners: The photo-performance project. <http://www.pbs.org/shakespeare/educators/performance/casestudy1.html>

National Council of Teachers of English (n.d.). *Pathways for teaching and learning with English language learners*. Online professional development course (fee required) available at <http://www.ncte.org/edpolicy/ell/resources/126760.htm>

Nilsen, A.P & Nilsen, D.L.F. (2004). Working under lucky stars: Language lessons for multilingual classrooms. *Voices from the Middle*, 11(4). Retrieved May 5, 2008 from http://elearning.ncte.org/section/content/Default.asp?WCI=pgDisplay&WCU=CRSCNT&ENTRY_ID=29ACA1F9703143A7BDAFB4A841E9E4E8.

Ms. Vogel's Guide to Blogging. <http://www.arlingtoncareercenter.com/msvogel>

A number of Web sites maintain bibliographies of culturally appropriate texts for children and adolescents:

The Barahona Center for the study of books in Spanish for Children and http://csbs.csusm.edu/csbs/www.book_eng.book_home?lang=SP

¡Colorín Colorado!. <http://www.colorincolorado.org/read>

Get Caught Reading's *New List of Recommended Titles Promote Literacy among Nation's Hispanic and Latino Community*. http://www.getcaughtreading.org/pressreleases/dia_pr.htm#reading%20list

The Lexile Framework for Reading rates books according to grade level, and teachers can search a database for books at a certain level. <http://www.lexile.com/EntrancePageHtml.aspx?1>

Print Resource

Cassady, J.K. (1998). Wordless books: No-risk tools for inclusive middle-grade classrooms. *Journal of Adolescent & Adult Literacy*, 41(6) 428-432.

Social Studies

Standards for teachers of social studies are maintained by the National Council for the Social Studies (NCSS, 2000). These standards do not explicitly reference English language learners, but they do charge social studies teachers with a responsibility to diverse learners:

The National Council for the Social Studies (NCSS)

Social studies teachers should possess the knowledge, capabilities, and dispositions to create at the appropriate school levels learning experiences that fit the different approaches to learning of diverse learners (NCSS, 2000, p. 51).

Vocabulary

Since Social Studies involves a lot of reading and writing, teachers should pay particular attention to pre-teaching vocabulary words with ELLs in mind. The selected words should be a combination of content words (the words typically bolded in a textbook) and other “access” words essential to grasping the meaning. For example, Calderón (2007) describes a lesson on trading and bartering skits in which the following vocabulary is pre-taught:

Access Words

coin	tool
societies	dye
ancient	worth
bronze	merchant
statue	doubtfulness

Content Words

barter	diffusion
economy	Lydians
trade	Phoenicians
colony	goods
cultural	

Accessing Content

Teachers can provide a pre-reading handout with key words, events, and dates that are extracted from the textbook. At right is an example timeline on the life of the Mexican American activist and leader of the United Farm Workers, César Chávez.

Often, the Internet is a resource for integrated graphic organizers, multi-media and content. For an example with animated maps, see the multimedia tutorial “European Voyages of Exploration” from the Applied History Group in the resources section that follows.

Another strategy that is particularly helpful for students with diverse cultural and education backgrounds is the Know-Want to Know-Learn (K-W-L) chart. This allows

César Chávez (1927-1993) Timeline

1927	Born in Arizona
1937	Family became migrant farm workers
1946	Joined the US Navy
1952	Joined the Community Service Organization, a Latino civil rights group
1968	Fasted for 25 days
1972	Fasted for 25 days
1975	The California Agricultural Labor Relations Act was passed to protect farm workers
1988	Fasted for 36 days ("Fast for Life")
1993	Died in Arizona
1994	Awarded the Presidential Medal of Freedom

Adapted from César E. Chávez Foundation (2008).

teachers to informally assess what background knowledge students have on a particular topic, and then adapt their instruction to fill in the gaps. The following is an example that could be used in conjunction with studying César Chávez:

K	W	L
What do you know about farm workers' rights?	What do you want to know about farm workers' rights?	What did you learn about farm workers' rights?

Once the students have completed the pre-reading activities, they need instruction in the metacognitive skills of reading. To teach these, the teacher can do a think-aloud to model asking questions, making judgments, and noting new words while reading.

Inquiry-based Projects

Another option besides scaffolding the text is to lead an inquiry-based project in which students act as historians or social scientists. If ELLs are literate in their native languages, they can complete Internet research in those languages. To encourage active participation, students should be able to choose their own topics within a common category. Choice enables students to draw on their own background knowledge and sociocultural identity, and familiarity with common themes or information will assist in understanding the material in English. In this way, ELLs are viewed as cultural resources that enrich the classroom experience for other students.

To learn more about teaching Social Studies to ELLs:

Web Resources

- Anstrom, K. (August 1998). *Preparing secondary education teachers to work with English language learners: Social Studies*. NCBE Resource Collection Series, 10. Retrieved December 17, 2007 from <http://www.ncela.gwu.edu/pubs/resource/ells/language.htm>
- Irvin, J. (2002). *Reading strategies for the social studies classroom*. Austin, TX: Holt, Rinehart and Winston. Retrieved December 30, 2007 from http://go.hrw.com/hrw.nd/gohrw_rls1/pKeywordResults?ST2Strategies
- National Clearinghouse for English Language Acquisition. (2002). *In the classroom: A toolkit for effective instruction of English language learners*. Retrieved May 5, 2008 from <http://www.ncela.gwu.edu/practice/itc/lessons/sinquiryss.html>
- The Applied History Research Group. (1997). *The European Voyages of Exploration*. Retrieved May 7, 2008 from http://www.ucalgary.ca/applied_history/tutor/eurvoya/vasco.html
- The César E. Chávez Foundation. (2008). *American Hero*. Retrieved May 13, 2008 from http://www.chavezfoundation.org/page.php?code=0010010000000000&page_ttl=American+Hero&kind=1

Print Resources

- Calderón, 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.
- Faltis, C.J. & Coulter, C.A. (2008). *Teaching English learners and immigrant students in secondary schools*. Upper Saddle River, NJ: Pearson Education.
- Irwin-DeVitis, L, Bromley, K., and Modlo, M. (1999). *50 graphic organizers for reading, writing, and more*. (1999). Scholastic Professional Books.
- King, M., Fagan, B., Bratt, T. & Baer, R. (1992). Social Studies instruction. In P.A. Richard-Amato & M.A. Snow (Eds.) *The multicultural classroom: Readings for content-area teachers* (pp 287-299). Reading, MA: Addison-Wesley.
- McKeown & Beck (1994). Making sense of accounts in history: Why young students don't and how they might. In G. Leinhardt, I. Beck & C. Stainton (Eds.) *Teaching and learning in history*.
- Verplaetse, L.S. & Migliacci, N. (2008). Making mainstream content comprehensible through sheltered instruction in L.S. Verplaetse & N. Migliacci (Eds.) *Inclusive pedagogy for English language learners*. New York: Lawrence Erlbaum Associates.

Science

The National Research Council's (NRC) *National science education* standards state that: the commitment to science for all implies inclusion of those who traditionally have not received encouragement and opportunity to pursue science -- women and girls, students of color, students with disabilities, and students with limited English proficiency. (NRC, 1996)

Vocabulary

Both fluent English speakers and English language learners will encounter new and unfamiliar vocabulary as they move through their science education. Unlike their English speaking peers, however, English learners are also constantly learning vocabulary in all of their school subjects as well as in their daily lives.

There are a number of ways in which teachers can make the massive vocabulary-learning process required of English learners easier.

- Use classroom routines to present vocabulary. You might spend two or three minutes at the beginning of a class highlighting scientific vocabulary that students will need in the class. Use the same type of language each time—for instance “Here are some key words.” By making the presentation of vocabulary a routine event, students are not faced with the extra task of working out what kind of instruction is going on.
- Exploit cognates. Cognates are words which sound similar across languages because they have common origins. Much of the scientific vocabulary of English comes from words with Latin origins (like *experiment*, *observe*, *precipitation*); these words are likely to have cognates in languages descended from Latin (including Spanish, French, and Portuguese).

Talking Science

Communication is a vital part of the scientific discovery process. Students working in small hands-on groups in the science classroom use back-and-forth communication to make meaning out of their observations and discoveries. Teachers should ensure that English language learners are not excluded from this crucial learning experience.

- Make sure that instructions are clear to everyone in the group, perhaps by providing them in written as well as oral form, so that ELLs have time to digest the content.
- Allow speakers of the same language to work together and to discuss scientific concepts in their native language before they communicate them in English.
- If groups are multilingual, teachers can assign roles to each member of the group, and construct roles with more or greater linguistic demands to suit their diverse students. For instance, a student with limited English might be assigned to connect key concepts to new vocabulary; a more proficient student might be responsible for taking observation notes.
- When calling on students, give them a moment or two to jot down ideas before they speak in front of the class. This allows students to marshall their thoughts and gives them time to think about the language that they will need to express their ideas.

Writing Science

English language learners may understand the concepts of science very well, but unless they have the tools to communicate their understanding, teachers have no way of assessing their comprehension (and may underestimate it). Teachers can help ELLs by providing varying degrees of scaffolding. Of particular use to ELLs are partial “sentence chunks” that scaffold the types of sentences students should use to communicate their scientific knowledge. Sentence chunks allow students to express their scientific learning without being hindered by lack of language skills—they also model the types of scientific language students can use in the future. As students become more proficient, less scaffolding is required.

LABORATORY REPORT	
Title Relationship between _____ and _____	
Background This experiment investigates _____. This experiment tests the hypothesis that _____. Based on _____ I predict that _____.	
Equipment <i>(Ensure students have the vocabulary to list the equipment.)</i>	Procedure <i>(Provide examples of verbs that students will need to list the procedure. For instance, you might include a list of verbs such as add, pour, fill, heat, distill, decant.)</i>
Observations At the beginning of the experiment, the _____ was _____. After _____, the _____ became _____.	
Conclusion Adding _____ to _____ causes _____.	

Example of a laboratory report with partial sentence chunks.

Instructional Congruence

Instructional congruence refers to “the process of merging academic disciplines with students’ linguistic and cultural experiences to make the academic content accessible, meaningful, and relevant for all students” (Lee, 2004, p. 72). Instructional congruence can refer to both ways of talking and thinking about scientific inquiry as well as ways of presenting scientific topics.

Students from diverse cultural backgrounds may have ways of approaching inquiry that differ from Western norms. They may come from cultures where it is considered inappropriate to question authorities such as teachers and textbooks. Students from different cultural backgrounds may also differ in terms of their comfort levels with working collaboratively or individually. The presentation of topics in traditional science lessons may also miss chances to connect to students’ background knowledge.

Teachers can modify instruction so that it values students' cultural norms while simultaneously facilitating scientific inquiry. In designing a unit on weather for a multi-year professional development program, a research team built elements into the unit designed to be convergent with students' learning. In this case, the students were mostly Hispanic students from the Caribbean and Central and South America.

The unit:

- used both metric and traditional units of measure;
- incorporated weather conditions familiar to students, such as hurricanes and other tropical weather patterns;
- used inexpensive household supplies for hands-on activities so that students could replicate the activities at home with their families;
- allowed students to work collaboratively or individually depending on their comfort level with these patterns;
- integrated science standards with both TESOL and English language arts standards to encourage English language development in social settings, in the academic content, and in socially and culturally appropriate ways.

To Learn More About Teaching Science to English Language Learners

Web Resources

- Anstrom, K. (1998). *Preparing secondary education teachers to work with English language learners: Science*. NCBE Resource Collection Series, No. 11. Available from <http://www.ncela.gwu.edu/pubs/resource/ells/science.htm>
- Dobb, F. (2004). *Essential elements of effective science instruction for English learners*. Los Angeles, CA: California Science Project. Available from http://csmc.ucop.edu/downloads/csp/essential_elements_2.pdf
- Gomez, K. & Madda, C. (1995). Vocabulary Instruction for ELL Latino Students in the Middle School Science Classroom. *Voices from the Middle*, 13(1), 42-47. Available from http://elearning.ncte.org/section/content/Default.asp?WCI=pgDisplay&WCU=CRSCNT&ENTRY_ID=B1585EDDA5D74E0381945A054587AC58
- Jarrett, D. (1999). *The inclusive classroom: Teaching mathematics and science to English language learners*. Portland, OR: Northwest Regional Educational Laboratory. Available from <http://www.nwrel.org/msec/images/resources/justgood/11.99.pdf>

Print Resources

- Carr, J., Sexton, U., & Lagunoff, R. (2006). *Making Science Accessible to English Learners: A Guidebook for Teachers*. San Francisco, CA: WestEd.
- Fathman, A.K. & Crowther, D.T. (2006). *Science for English language learners: K-12 classroom strategies*. Arlington, VA: National Science Teachers' Association Press.
- The weather unit described above is taken from Lee, O. (2004). Teacher change in beliefs and practices in science and literacy instruction with English language learners. *Journal of Research in Science Teaching*, 41(1), 65-93.

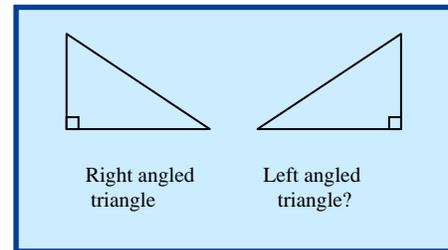
Mathematics

The National Council of Teachers of Mathematics (NCTM) pedagogy standard 8.1. requires that the teacher:

Selects, uses, and determines suitability of the wide variety of available mathematics curricula and teaching materials for all students including those with special needs such as the gifted, challenged and speakers of other languages.
(NCTM, 2003)

Math Vocabulary

Words which have different meanings in different contexts can be stumbling blocks for ELLs. Math vocabulary often uses words with everyday meanings which have very specific meanings in mathematics—words like *product*, *root*, *function* or *right*, as in *right angle*. Teachers can help students by pointing out that some words have specific meanings in mathematics, and when possible, trying to show how their mathematical meaning connects with their everyday meaning.



One way to give students a boost in their math vocabulary is to be aware of cognates—words which sound the same across languages because they have a common origin.

English-Spanish Cognates

equal	igual	angle	el ángulo	capacity	la capacidad
diameter	el diámetro	triangle	el triángulo	probability	la probabilidad
estimate	estimar	rectangle	el rectángulo		

Beware! Not all similar-sounding words have similar meanings. Sometimes the meaning of a word in another language may not be a perfect match for its English cognate. The Spanish *la figura*, for example, means “figure” in the sense of a table or graph, but does not refer to a numeral (as in a *figure 8*).

Sentence Structure in Math

Even simple word problems in mathematics can be difficult for English language learners because they require students to use language to understand the relationships between mathematical operators and numbers. There may be several ways to express a mathematical operation in a word problem. For instance, a problem involving subtraction might use “minus” or “less than”; one involving division may use the terms “divided by”, “into,” or “over.”

Furthermore, choosing a particular word changes the relationships between the other words in the sentence. A problem that uses the word “minus” tells readers or listeners that they should take the first number and subtract the second number. In a “minus” problem, the order of the words in the sentence is the same as the order of the terms in the operation:

	The number a	is	five	minus	b
Right!	a	=	5	-	b

A problem that uses the expression “less than” is more complicated:

	The number a	is	five	less than	b
X Wrong!	a	=	5	-	b
Right!	a	=	b	-	5

Because a “less than” sentence is more complex, students may require explicit instruction and practice with this kind of sentence. Although this subtraction example is relatively simple, good math teachers are alert for similar patterns in more complex word problems. Particularly in assessments, unfamiliar word pattern problems may end up testing students’ language ability, not what they know and can do in mathematics.

Context

Although the specifics of vocabulary and sentence structure are important, they are not the end goal of mathematics education. Rather, they are a communicative toolkit which give students the ability to think in mathematical ways and to communicate to others their mathematical thinking.

Skilled math teachers know that it is easier to encourage mathematical thinking when math in the classroom is connected to real-world situations. Math teachers who are working in multicultural classrooms need to consider whether their “real-world” problems reflect the real worlds of their students. In what real-world situations will students *need to use* their mathematics knowledge?

- In Alaska, the *Math in a Cultural Context* curriculum contains a unit entitled *Drying Salmon*. In *Drying Salmon*, students combine indigenous knowledge of fishing practices with skills measuring, estimating, proportional thinking and algebra as part of a thematic math unit.
- “Mrs. Diamante” teaches a ninth-grade geometry class in an ethnically diverse school. About one third of her students are English language learners. Her lessons about functions and slope connect mathematical ideas to the needs of her students’ communities. Students in Mrs. Diamante’s class have used their math skills to design wheelchair ramps, skate ramps, and sloped roofs for bus shelters.

Although actual examples of ways that other teachers have adapted lessons to fit the cultural contexts of their students can be illuminating and inspiring, teachers cannot and should not take an example from one context and expect it to work in another. Every math classroom is situated within its own specific community, and each community is unique. Good math teachers will look for examples which fit their own contexts, and will work with their pedagogical content knowledge tools to adapt lessons to fit their own unique classrooms.

To Learn More About Teaching Mathematics to English Language Learners

Web Resources

The Texas State University System Math for English Language Learners Project (<http://www.tsusmell.org/>) has a wealth of useful techniques and tips for math teachers.

The Connected Mathematics project at Michigan State University has a page on mathematics and English language learners at <http://connectedmath.msu.edu/teaching/ell.html>

Long Beach Unified Schools District (n.d.) *Math cognates*. Retrieved April 14, 2008 from http://www.lbschools.net/Main_Offices/Curriculum/Areas/Mathematics/XCD/ListOfMathCognates.pdf

Southwest Educational Development Laboratory (SEDL) (2007). *What can a mathematics teacher do for the English language learner?* Austin, TX: Author. Available at <http://txcc.sedl.org/resources/mell/index.html>

Stepanek, J. (2004). From Barriers To Bridges: Diverse Languages in Mathematics and Science. *Northwest Teacher*, 5(1), 2–5. This resource expands on many of the themes expressed above: <http://www.nwrel.org/msec/images/nwteacher/winter2004/winter2004.pdf>

Print Resources

More information on the unit *Drying Salmon* can be found in Nelson-Barber, S. & Lipka, J. (2008). Rethinking the case for culture-based curriculum: Conditions that support improved mathematics performance in diverse classrooms. In M.E. Brisk (Ed.), *Language, Culture and Community in Teacher Education* (pp. 99-126). New York: Lawrence Erlbaum Associates.

“Mrs. Diamante” is a composite character described in Chapter 5 of Faltis, Christian J. & Coulter, Cathy A. (2008). *Teaching English learners and immigrant students in secondary schools*. Upper Saddle River, NJ: Pearson Education, Inc.

Other ideas described above are adapted from:

Anstrom, K. (1999). Preparing secondary education teachers to work with English language learners: Mathematics. *NCBE resource collection series*, no. 14. Retrieved February 28, 2008 from <http://www.ncela.gwu.edu/pubs/resource/ells/math.htm>

Dale, T. C., & Cuevas, G. J. (1987). Integrating mathematics and language learning. In J. A. Crandall (Ed.), *ESL through content-area instruction: Mathematics, science, social studies* (pp. 9-54). Englewood Cliffs, NJ: Prentice Hall Regents.

Secada, W. G. (Ed.) (2000). *Changing the faces of mathematics: Perspectives on multiculturalism and gender equity*. Reston, VA: National Council of Teachers of Mathematics.

References

- Abbate-Vaughn, J. (2008). Highly qualified teachers for our schools: Developing knowledge, skills, and dispositions to teach culturally and linguistically diverse students. In M.E. Brisk (Ed.), *Language, Culture, and Community in Teacher Education* (pp. 175-202). New York: Lawrence Erlbaum Associates.
- Abedi, J., Courtner, M., Mirocha, J., Leon, S., Goldberg, J. (2005). *Language Accommodations for English Language Learners in Large Scale Assessments: Bilingual Dictionaries and Linguistic Modification*. Washington, DC: Institute of Education Sciences.
- Alexander, D. Heaviside, S. & Farris, E. (1999). *Status of education reform in public elementary and secondary schools: Teachers' perspectives*. Washington DC: U.S. Department of Education, National Center for Education Statistics. Retrieved December 4, 2007 from <http://nces.ed.gov/pubs99/1999045.pdf>.
- Atunéz, B. (2000). When everyone is involved: Parents and communities in school reform. In *Framing effective practice: Topics and issues in educating English language learners*. Washington, DC: National Clearinghouse for Bilingual Education. Retrieved February 20, 2008 from <http://www.ncela.gwu.edu/pubs/tasynthesis/framing/framing.pdf>
- Banks, J.A. (2004). Multicultural education: Historical development, dimensions, and practice. In J.A. Banks & C. A. McGee Banks (Eds.) *Handbook of Research on Multicultural Education* (2nd ed.) (pp. 3-29). San Francisco, CA: Jossey-Bass.
- Barron, V. & DiCerbo, P. (2006). *In the classroom: A toolkit for effective instruction of English learners, Grade level content 7-12 Secondary*. Retrieved March 5, 2008 from <http://www.ncela.gwu.edu/practice/itc/secondary.html>
- Bartolomé, L. (2002). Creating an equal playing field: Teachers as advocates, border crossers, and cultural brokers. In Z.F. Beykont (Ed.), *The power of culture: Teaching across language difference* (pp. 167-191). Cambridge, MA: Harvard Education Publishing Group.
- Batalova, J., Fix, M., & Murray, J. (2005). *English language learner adolescents: Demographics and literacy achievements*. Report to the Center for Applied Linguistics. Washington, DC: Migration Policy Institute.
- Berriz, B.R. (2002). Connecting classroom and community through the arts and oral narrative. In Z.F. Beykont (Ed.), *The power of culture: Teaching across language difference* (pp. 147-163). Cambridge, MA: Harvard Education Publishing Group.
- Brisk, M.E. (2008). Program and faculty transformation: Enhancing teacher preparation. In M.E. Brisk (Ed.), *Language, culture, and community in teacher education* (pp. 249-66). New York: Lawrence Erlbaum Associates.
- Brisk, M.E., Horan, D.A., & Macdonald, E. (2008). A scaffolded approach to learning to write in L.S. Verplaetse & N. Migliacci (Eds.) *Inclusive pedagogy for English language learners*. New York: Lawrence Erlbaum Associates.
- Buck, G., Mast, C., Ehlers, N., & Franklin, E. (2005). Preparing teachers to create a mainstream science classroom conducive to the needs of English-language learners: A feminist action research project, *Journal of Research in Science Teaching*, 42(9), 1013-1031.
-

- Calderón, 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.
- Capps, R., Fix, M., Murray, J., Ost, J., Passel, J.S., & Herwanto, S. (2005). *The new demography of America's schools: Immigration and the No Child Left Behind Act*. Washington, DC: Urban Institute. Retrieved February 4, 2008 from http://www.urban.org/UploadedPDF/311230_new_demography.pdf.
- Cassady, J.K. (1998). Wordless books: No-risk tools for inclusive middle-grade classrooms. *Journal of Adolescent & Adult Literacy*, 41, 6. 428-432.
- Center on Education Policy. (2005). *States try harder, but gaps persist: High school exit exams 2005*. Washington, DC: Center on Education Policy. Retrieved February 4, 2008 from <http://www.cep-dc.org/index.cfm?fuseaction=document.showDocumentByID&DocumentID=143&C:\CFusionMX7\verity\Data\dummy.txt>.
- Clair, Nancy (Autumn 1998). Research and Practice in English Language Teacher Education *TESOL Quarterly*, 32(3), pp. 465-492.
- Cohen, D.K. & Hill, H. C. (1998). *Instructional policy and classroom performance: The mathematics reform in California (RR-39)*. Philadelphia: Consortium for Policy Research in Education.
- Collier, Virginia (1994). Acquiring a second language for school. *Directions in Language & Education*. 1 (4). DC: National Clearinghouse for Bilingual Education.
- Colorín Colorado (2007). Using cognates to develop comprehension in English. Retrieved April 11, 2008 from <http://colorincolorado.org/article/14307>
- Costa, J., McPhail, G., Smith, J., Brisk, M. (2005) Faculty First: The Challenge of Infusing the Teacher Education Curriculum with Scholarship on English Language Learners. *Journal of Teacher Education*, 56(2), 104-118.
- Crawford, J. & Krashen, S. (2007). *English learners in American classrooms: 101 questions, 101 answers*. New York: Scholastic.
- Cummins, J. (1994). Primary language instruction and the education of language minority students in *Schooling and Language Minority Students: A Theoretical Framework*. Los Angeles, CA: Evaluation, Dissemination, and Assessment Center.
- de Jong, E.J., & Harper, C.A. (2005). Preparing mainstream teachers for English language learners: Is being a good teacher good enough? *Teacher Education Quarterly*, 32(2), 101-124.
- de Jong, E.J., & Harper, C.A. (2008). ESL is good teaching “plus”: Preparing standard curriculum teachers for all learners. In M.E. Brisk (Ed.), *Language, Culture and Community in Teacher Education* (pp. 127-48). New York: Lawrence Erlbaum Associates.
- Díaz-Rico, L.T. (2008). *Strategies for teaching English language learners*, 2nd edition. New York: Pearson.
- Echevarria, J. & Short, D.J. (1999). *The Sheltered Instruction Observation Protocol: A tool for teacher-research collaboration and professional development*. Retrieved February 28, 2008 from <http://www.cal.org/resources/digest/sheltered.html>
- Eisenhower Mathematics and Science Consortia and Clearinghouse Network (2005). *What experience has taught us about professional development: Facilitating*

- mathematics and science reform: Lessons learned*. National Network of Eisenhower Regional Consortia and Clearinghouse.
- Faltis, Christian J. & Coulter, Cathy A. (2008). *Teaching English learners and immigrant students in secondary schools*. Upper Saddle River, NJ: Pearson Education, Inc.
- Fox, H. (1994). *Listening to the world: Cultural issues in academic writing*. Urbana, IL: National Council of Teachers of English.
- Francis, D.J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). *Practical guidelines for the education of English language learners*. Center on Instruction.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Gersten, R., Baker, S.K., Shanahan, T., Linan-Thompson, S., Collins, P., Scarcella, R. (2007). *Effective literacy and English language instruction for English learners in the elementary grades: A practice guide* (NCEE 2007-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved March 31, 2008 from <http://ies.ed.gov/ncee>.
- González, N., Moll, L., Tenery, M.F., Rivera, A., Rendón, P., Gonzales, R., et al. (2005). Funds of knowledge for teaching in Latino households. In N. González (Ed.) *Funds of knowledge: Theorizing practices in households and classrooms* (pp. 89-111). Mahwah, NJ: Lawrence Erlbaum Associates.
- Gottlieb, M., Cranley, M.E., Oliver, A.R. (2007). *Understanding the WIDA English language proficiency standards: A resource guide*. Madison, WI: Board of Regents of the University of Wisconsin. Retrieved March 31, 2008 from http://www.wida.us/standards/Resource_Guide_web.pdf.
- Graham, S. & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools – A report to the Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.
- Grant, E.A., & Wong, S.D. (2003). Barriers to literacy for language-minority learners: An argument for change in the literacy education profession. *Journal of Adolescent & Adult Literacy*, 46, 386-394.
- Guskey, T. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press, Inc.
- Harper, C. & de Jong, E. (2004). Misconceptions about teaching English-language learners. *Journal of Adolescent and Adult Literacy*, 48 (2), 152-162.
- Hiebert, E.H. & Lubliner, S. (forthcoming). To appear in S.J. Samuels & A. Farstrup (Eds.), *What research has to say about vocabulary*. Newark, DE: International Reading Association.
- Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.
- Institute of Education Sciences, What Works Clearinghouse (2007). *Interventions for Elementary School English Language Learners: Increasing English Language Acquisition and Academic Achievement*. Washington DC: Author. Available from <http://ies.ed.gov/ncee/wwc/reports/topic.aspx?tid=10>

- Karabenick, S.A. & Clemens Noda, P.A. (2004). Professional development implications of teachers' beliefs and attitudes toward English language learners. *Bilingual Research Journal*, 28(1), 55-75.
- Kennedy, M. M. (1998). *Form and substance in in-service teacher education*. (Research monograph No. 13). Arlington, VA: National Science Foundation.
- Kinsella, K. (2008, February). *Bolstering language proficiency for English learners through structured academic interaction*. Symposium conducted at the meeting of the Virginia English as a Second Language Supervisors' Association, Richmond, VA.
- Kruse, S., Louis, K., & Bryk, A. (1994, Spring). *Building professional community in schools*. Madison, WI: Center on Organization and Restructuring Schools.
- Lee, J.S. & Oxelson, E. (2006). "It's not my job": K-12 teacher attitudes toward students' heritage language maintenance. *Bilingual Research Journal*, 30(2), 453-477.
- Lightbown, P.M. & Spada, N. (2006). *How Languages are Learned*. Oxford: Oxford University Press.
- McLaughlin, B. (1993). *Myths and misconceptions about second language learning: What every teacher needs to unlearn*. Santa Cruz, CA: National Center for Research on Cultural Diversity and Second Language Learning. Retrieved on Dec. 13, 2007, from <http://www.ncela.gwu.edu/pubs/symposia/readingarticle6/mclaughlin93.html>.
- McLaughlin, M., Talbert, J.E., Gilbert, S., Hightower, A.M., Husbands, J.L., Marsh, J.A. et al. (2002). *Domains of district action: A framework for assessing district reform strategies*. Center for the Study of Teaching and Policy: Stanford University.
- Menken, K. & Atunéz, B. (2001). *An overview of the preparation and certification of teachers working with limited English proficient students*. Washington, D.C., National Clearinghouse of Bilingual Education. Retrieved December 11, 2007 from <http://www.ericsp.org/pages/digests/ncbe.pdf>.
- Meskill, C. (2005). Infusing English language learner issues throughout professional educator curricula: The Training All Teachers project. *Teachers College Record*, 107(4), pp. 739-56.
- Moll, L., Amanti, C., Neff, D., & González, N. (2005). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. . In N. González (Ed.) *Funds of knowledge: Theorizing practices in households and classrooms* (pp. 71-88). Mahwah, NJ: Lawrence Erlbaum Associates.
- Nation, P. & R. Waring. (1997). Vocabulary size, text coverage and word lists. In: Schmitt, N. and M. McCarthy (eds). *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press. 6-19.
- National Chavez Center (n.d.). Cesar E Chávez – Biography. Available from <http://www.nationalchavezcenter.org/main.html>
- National Clearinghouse for English Language Acquisition. (2007). *The Growing Numbers of Limited English Proficient Students*. Washington, DC: Author. Retrieved January 16, 2008 from http://www.ncela.gwu.edu/policy/states/reports/statedata/2005LEP/GrowingLEP_0506.pdf.
- National Council for Accreditation of Teacher Education (NCATE). (2006). *Professional Standards for the Accreditation of Schools, Colleges, and Departments of Education*.

- Retrieved November 26, 2007 from http://www.ncate.org/documents/standards/unit_stnds_2006.pdf.
- National Council for Accreditation of Teacher Education (NCATE). (2007). *The NCATE Unit Standards*. Retrieved November 26, 2007 from <http://www.ncate.org/documents/standards/UnitStandardsMay07.pdf>
- National Council for the Social Studies. (2000). *National standards for social studies teachers*. Silver Spring, MD: Author. Available from <http://www.socialstudies.org/teacherstandards>
- National Council of Teachers of English. (1996). *Guidelines for the preparation of teachers of English language arts*. Urbana, IL: Author. Available from <http://www.ncte.org/groups/cee/links/126867.htm>
- National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Reston, VA: Author. Available from <http://standards.nctm.org>
- National Research Council. (1996). *National science education standards*. Washington, DC: National Academy Press. Available from <http://www.nap.edu/readingroom/books/nse>
- National Staff Development Council (NSDC) (2001). *Standards for staff development: Revised*. Oxford, OH: Author.
- Nevárez-La Torre, A.A., Sanford-DeShields, J.S., Soundy, C., Leonard, J. & Woyshner, C. (2008). Faculty perspectives on integrating linguistic diversity issues into an urban teacher education program. In M.E. Brisk (Ed.), *Language, culture, and community in teacher education* (pp. 267-312). New York: Lawrence Erlbaum Associates.
- Newmann, F. & Wehlage, G. (1995). *Successful school restructuring: A report to the public and educators*. Madison, WI: Center on Organization and Restructuring Schools.
- Peregoy, S.F. & Boyle, O.F. (2005). *Reading, writing, and learning in ESL: A resource book for K-12 teachers*. New York: Pearson Education.
- Phuntsog, N. (2001). Culturally responsive teaching: What do selected United States elementary school teachers think? *Intercultural Education*, 12(1), 51-64.
- Reeves, J.R. (2006). Secondary teacher attitudes toward including English-language learners in mainstream classrooms. *Journal of Educational Research*, 99(3), 131-142.
- Reyes, A. (2006). Reculturing principals as leaders for cultural and linguistic diversity. In K. Téllez & H.C. Waxman (Eds.) *Preparing quality educators for English language learners* (pp. 145-56). Mahwah, NJ: Lawrence Erlbaum.
- Reyes, S.A. & Vallone, T.L. (2008). *Constructivist strategies for teaching English language learners*. Thousand Oaks, CA: Corwin Press.
- Richard-Amato, P.A. & Snow, M.A. (1992) *The multicultural classroom: Readings for content-area teachers*. Reading, MA: Addison-Wesley.
- Samway, K.D. & McKeon, D. (1999). *Myths and realities: Best practices for language minority students*. Portsmouth, NH: Heinemann.
- Scarcella, R. (2005). *Teaching the language of school: How all teachers can support English language learners*. Symposium conducted at the meeting of the Office of English Language Acquisition's Celebrate Our Rising Stars Summit, Washington, DC. Retrieved April 30, 2008 from

- http://www.ncela.gwu.edu/oela/summit2005/presentations/RobinScarcella_generaIModifiedFinal.pdf
- Schleppegrell, M. J. (2004). *The language of schooling: A functional linguistics perspective*. Mahwah, N. J.: Lawrence Erlbaum Associates.
- Shohamy, E. (2001). Democratic assessment as an alternative. *Language Testing*, Vol. 18, no. 4, 373-391.
- Snow, M.A. (2000). *Implementing the ESL Standards for Pre-K-12 Students Through Teacher Education*. Alexandria, VA: Teachers of English to Speakers of Other Languages (TESOL).
- Suttmiller, E.F. & González, M.L. (2006). Successful school leadership for English language learners. In K. Téllez & H.C. Waxman (Eds.) *Preparing quality educators for English language learners* (pp. 167-88). Mahweh, NJ: Lawrence Erlbaum.
- Teachers of English to Speakers of Other Languages (2006). *PreK-12 English Language Proficiency Standards*. Available from http://www.tesol.org/s_tesol/sec_document.asp?CID=1186&DID=5349
- Teachers of English to Speakers of Other Languages (TESOL). (2001). *Integrating the ESL Standards Into Classroom Practice: Grades 9-12*. Alexandria, VA: Author
- Teachers of English to Speakers of Other Languages (TESOL). (2006). *PreK-12 English Language Proficiency Standards*. Alexandria, VA: Author
- Telléz, K. & Waxman, H.C. (2005). *Quality teachers for English language learners: A review of the research*. The Laboratory for Student Success, The Mid-Atlantic Regional Educational Laboratory at Temple University Center for Research in Human Development and Education. Retrieved February 28, 2008 from <http://www.temple.edu/Lss/pdf/ReviewOfTheResearchTellezWaxman.pdf>
- U.S. Department of Agriculture (June, 2007). *National School Lunch Program*. Retrieved April 10, 2008 from <http://www.fns.usda.gov/cnd/lunch/AboutLunch/NSLPPFactSheet.pdf>.
- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (2007a). *National Assessment of Educational Progress (NAEP) 2007 Mathematics Assessment*. Washington DC: Author. Retrieved April 19, 2008 from <http://nces.ed.gov/nationsreportcard/nde/>.
- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (2007b). *National Assessment of Educational Progress (NAEP), 2007 Reading Assessment*. Washington DC: Author. Retrieved April 19, 2008 from <http://nces.ed.gov/nationsreportcard/nde/>.
- U.S. Department of Education, National Center for Education Statistics. (2004). *Language minorities and their educational and labor market indicators— Recent trends, NCES 2004-09*. Washington, DC: U.S. Department of Education.
- U.S. Department of Education, National Center for Education Statistics. (1997). *1993–94 Schools and Staffing Survey: A Profile of Policies and Practices for Limited English Proficient Students: Screening Methods, Program Support, and Teacher Training*. (NCES 97–472). Washington, DC. Retrieved December 10, 2007 from <http://nces.ed.gov/pubs97/97472.pdf>.
- U.S. Department of Education, National Center for Education Statistics. (2001). *Teacher Preparation and Professional Development: 2000* (NCES 2001–088).

-
- Washington, DC: Parsad, B., Lewis, L. & Farris, E. Retrieved December 10, 2007 from <http://nces.ed.gov/pubs2001/2001088.pdf>.
- Verplaetse, L.S. & Migliacci, N. (2008). Making mainstream content comprehensible through sheltered instruction in L.S. Verplaetse & N. Migliacci (Eds.) *Inclusive pedagogy for English language learners*. New York: Lawrence Erlbaum Associates.
- Walqui, A. & DeFazio, A.J. (2003). The selection of written text for English learners in *Teaching Reading to Adolescent English Learners*. San Francisco, CA: WestEd.
- Walqui, A. (2001). Accomplished teaching with English learners: A conceptualization of teacher expertise. *The Multilingual Educator*, 2(2), 51–56.
- Warren, B., & Rosebery, A. S. (1995). Equity in the future tense: Redefining relationships among teachers, students, and science in linguistic minority classroom. In W. G. Secada, E. Fennema, & L. B. Adajian (Eds.), *New directions for equity in mathematics education* (pp. 298-328). New York: Cambridge University Press.
- Zehler, A.M., Fleischman, H.L., Hopstock, P.J., Stephenson, T.G., Pendick, M.L. & Sapru, S. (2003). *Policy Report: Summary of Findings Related to LEP and Sp-Ed LEP Students*. Washington DC: U.S. Department of Education, Office of English Language Acquisition, Language Enhancement, and Academic Achievement of Limited English Proficient Students (OELA). Retrieved December 3, 2007 from <http://www.ncela.gwu.edu/resabout/research/descriptivestudyfiles>.

**Educating English Language Learners:
Building Teacher Capacity
Roundtable Report**

Volume II

Annotated Bibliography

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Preface

This bibliography was compiled as part of the OELA/NCELA Roundtable on Teacher Education and Professional Development of ELL Content Teachers. Panel members submitted an annotated list of significant references prior to the January 08 meeting. The bibliography was augmented by NCELA staff members during the development of Volume I. It is intended as an addition to the literature, and does not represent an exhaustive review of available research. References are sorted by category; the set of categories corresponds largely to the chapters and subsections of Volume I. Although many of the references span a range of topics, they have been placed in the most relevant category. The bibliography is aimed at for policymakers, professional development designers, and teachers in study groups and university graduate programs.

Rationale

Rationale

August, D., and T. Shanahan, Eds. (2006) *Developing literacy in second language learners: Report of the National Literacy Panel on language minority children and youth*. Mahway, NJ: Lawrence Erlbaum.

A cadre of experts examined 5 themes related to English Language Learners' literacy development. The task was to present current knowledge of second language (L2) literacy and make recommendations for further research. The panel focused on L2 literacy development, cross-linguistic relationships, sociocultural contexts of L2 literacy, educational implications of instruction and student assessment. The format of the report for each area included specific background information, instructional practices, issues of methodology, research conclusions and suggestions for additional inquiries.

This report provides a major review of the research on educating English learners. Its findings and recommendations can be summarized in three major points:

Instruction in the primary language helps English learners achieve. The National Literacy Panel conducted a meta-analysis of experimental studies and concluded that teaching academic skills such as reading in the first language is more effective in terms of second language achievement than simply immersing students in English instruction.

Good instruction helps English learners achieve. Instructional quality is also important, regardless of instructional language. The evidence suggests that ELLs learn much the same way as non-ELLs and that good instruction for students in general tends to be good instruction for ELLs in particular.

English learners require instructional accommodations. The panel found that the impact of instructional interventions was weaker for ELLs than they were for English speakers. The panel suggested the following accommodations: strategic use of the primary language for clarification and explanation; extremely clear instructions and expectations; predictable and consistent classroom management routines; additional opportunities for practice; more extended explanations; redundant information through visual cues, physical gestures about lesson content and classroom procedures; focusing on similarities and differences between English and the students' native languages; taking into account and building upon students' attainment levels in their native language; identifying and clarifying difficult words and passages within texts to facilitate comprehension; consolidating text knowledge through summarization; giving students extra practice in reading words, sentences, and stories; giving attention to vocabulary, checking comprehension, presenting ideas verbally and in writing; and, paraphrasing students' remarks and encouraging them to expand on those remarks.

National Panel on Literacy for Adolescent English Language Learners. (2006). *Double the Work: Academic Literacy for Adolescent English Language Learners*. New York: The New York Carnegie Corporation.

Because adolescent English language learners are learning English at the same time they are studying core content areas in English, they must actually perform double the work of native English speakers in U.S. secondary schools. The panel outlined six major challenges to improving the literacy of English language learners and recommended an array of strategies for day-to-day teaching practices to surmount these challenges. The report follows each challenge section with an extensive discussion of potential solutions and provides important information to help policymakers develop strategies that will help these students reach their full potential.

The report identifies the major challenges to improving literacy in adolescent ELLs: Lack of common criteria for identifying ELLs and tracking their performance; lack of appropriate assessments; inadequate educator capacity for improving literacy in ELLs; lack of appropriate and flexible program options; limited use of research-based instructional practices; and lack of a strong and coherent research agenda for adolescent ELL literacy.

The report makes the following recommendations to help meet the literacy needs of ELLs: Set common criteria for identifying these learners and tracking their performance; develop new and improved assessments of their native language abilities, English language development, and content-knowledge learning; build capacity among pre-service and current educators to instruct these learners effectively; design appropriate and flexible secondary school programs that offer time and coursework that account for the second language development process; use research-based instructional practices more widely and consistently; and, fund and conduct more short- and long-term research on new and existing interventions and programs, and on the academic performance of these adolescent ELLs.

Demographic Information

Kindler, A.L. (2002). *Survey of the states' limited English proficient students and available educational programs and services 2000-2001 summary report*. Washington, DC: National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs. Available from <http://www.ncela.gwu.edu/policy/states/reports/seareports/0001/sea0001.pdf>

OBEMLA's survey gathers information on the enrollment, educational condition, and services received by LEP students. Enrollment increased in 1999-2000. The majority of students are at the elementary level, and California has the largest population. The majority of LEPs speak Spanish (77%). There is consistency across states in methods of identifying LEP students, but divergence in placement. A great deal of additional data is reported.

Menken, K. & Atunéz, B. (2001). *An overview of the preparation and certification of teachers working with limited English proficient students*. Washington, D.C., National

Clearinghouse of Bilingual Education. Retrieved December 11, 2007 from <http://www.ericsp.org/pages/digests/ncbe.pdf>.

This investigation by The National Clearinghouse for Bilingual Education (NCBE) in partnership with The American Association of Colleges for Teacher Education (AACTE) set out to create a national portrait of the preparation of all teachers of ELLs, including mainstream teachers, but specifically focused on the preparation of bilingual education teachers. This descriptive study combined wide-scale survey data (417 usable responses were garnered) with qualitative analysis to explore the preparation and certification of teachers of English language learners (ELLs). A matrix was developed that identified three critical areas of knowledge including: pedagogy, linguistics and cultural and linguistic diversity. Findings revealed that of the three areas, the area of linguistics receives less emphasis at both state and institutional levels. In addition, findings indicate that a small number of Institutions of Higher Education (IHEs) offer bilingual teacher preparation, and less than 1/6th of those surveyed require preparation for mainstream teachers to work with ELLs.

Secada, W. (1992). Race, ethnicity, social class, language, and achievement in mathematics. In D. Grouws (Ed.), *Handbook of research on math teaching and learning* (pp. 623-660). New York: Macmillan.

This review of the quantitative research lays out an intellectual agenda for scholarly research on the differential effectiveness of mathematics education based on social class, race, ethnicity, language background, and gender. The chapter discusses how we define diverse groups, mathematics achievement of these groups, and efforts to close the achievement gap. There is a relationship between the degree of English language proficiency and math achievement in English, with most LEP students performing below NS students. However, bilingualism (as opposed to Spanish-dominant, for example) is positively correlated to achievement. One of the great concerns is how research moves from description to prediction to causation. LEP students are better off receiving instruction in their native language, which is positively correlated with mathematics achievement. Overall, the research casts differences in terms of individual ability, and demographic diversity and achievement are not addressed directly. Future work needs to focus on impact studies (not status studies), and reforms must be developed for the target groups, not for the overall student population.

Télez, K., & Waxman, H. (2004). Quality teachers for English language learners: A research synthesis. Publication series no. 2 U.S. Census Bureau. (2000). *QT-P13: Ancestry: 2000, 2004*. Retrieved from <http://www.census.gov/main/www/cen2000.html>

This synthesis provides an overview of the general studies of teacher quality, and proposes four areas of policy levers that can raise teacher quality for English language learners (ELLs). The four areas are preservice, recruitment and selection of teachers, inservice, and retention of exemplary ELD teachers. The paper describes the role of teacher education in preparing preservice teachers, identifies some exemplary inservice programs, states the standards developed for ELD teachers, and describes legislative and policy issues in licensing ELL teachers. Télez and Waxman suggest linking areas of linguistic and cultural knowledge with

ELD teaching and pedagogy in order to provide quality instruction to ELLs. In conclusion, the authors reject any attempt at rigid guidelines and argue for a knowledge base that allows flexibility for the varied contexts in which instruction occurs. They recommend that all ELD teachers must be both content and language teachers.

Attitudes & Beliefs of Teachers

Bartolomé, L. (2002). Creating an equal playing field: Teachers as advocates, border crossers, and cultural brokers. In Z.F. Beykont (Ed.), *The power of culture: Teaching across language difference* (pp. 167-191). Cambridge, MA: Harvard Education Publishing Group.

Bartolomé contributes an essay on successful resistance to harmful dominant cultural norms as well as an exploration (via interviews) of the ideological standpoints of exemplary educators. She argues that it is imperative that the teacher workforce, which is mostly female and White, challenges conventional explanations for the achievement gap between middle-class and White students and their minority and/or low-income counterparts. The primary thrust of her argument is that teachers, and teacher education programs, must foster “political clarity and ideological clarity” with regards to beliefs about the reasons for the achievement gap.

Lee, J.S. & Oxelson, E. (2006). “It’s not my job”: K-12 teacher attitudes toward students’ heritage language maintenance. *Bilingual Research Journal*, 30(2), 453-477.

Building on work that shows that teacher attitudes toward home language has a direct effect on the efficacy of instruction, Lee & Oxelson’s study raises the hypothesis that teacher attitudes are more strongly influenced by training than by other factors such as length of experience or exposure to bilingual students. Sixty-nine teachers across seven schools in four school districts in California participated in a survey designed to probe teacher attitudes toward bilingualism as well as their willingness to encourage heritage language maintenance through classroom practice. Attitudes toward bilingualism and toward classroom practice tend to be more positive for teachers who have completed either ESL or BCLAD (Bilingual Cross-Cultural Language and Academic Development) training. Attitudes are also more positive among teachers who have fluency in at least one language other than English. No significant difference in attitude was found when teachers are grouped by number of years in the classroom, or by numbers of ELL students taught.

Phuntsog, N. (2001). Culturally responsive teaching: What do selected United States elementary school teachers think? *Intercultural Education*, 12(1), 51-64.

Phuntsog sets out to probe teacher beliefs with respect to culturally responsive pedagogy, defined as “classroom experiences that align with students’ home culture” (p.52). The study surveys 33 classroom teachers and M.Ed. students in California; all of the participants are either CLAD/BCLAD certified or in the process of completing certification. The participants overwhelmingly believed that culturally responsive teaching was important. They also had a strong consensus of views on questions which probed their perception of the rationale behind

culturally responsive teaching. In a final, open-ended question, participants were asked to offer suggestions to improve teacher training programs. Common themes included: enhancement of student teaching experiences; mandatory CLAD/BCLAD certification; practice in culturally responsive pedagogical strategies; and the promotion of multicultural literature.

Professional Development and Teacher Education Program Design

Teacher Preparation Programs

Structure

Merino, B. (1999). Preparing secondary teachers to teach a second language: The case of the United States with a focus on California. In C. J. Faltis & P. Wolfe (Eds.), *So much to say: Adolescents, bilingualism & ESL in the secondary school* (pp. 225-254). New York, N.Y.: Teachers' College Press.

This paper evaluates research surrounding the implementation of reforms in teacher education programs aimed at teachers who work with ELLs. The author notes that there is little federal policy addressing this matter, and focuses primarily on California and the policy reforms which led to requirements for CLAD and BCLAD certification of California teachers. Despite mostly positive reactions on the part of IHEs to these reforms, the effect of the reforms on teacher outcomes is understudied. Merino surveys research on teacher education policy, and declares there is a preponderance of "competency" approaches which focus on what teachers should know, but a dearth of research on how to best teach this content and a failure to evaluate the outcomes of such teaching. She also cites a recent shift in attitudes in teacher education toward practice- and collaboration-based education in place of content delivery. Her piece concludes with an in-depth analysis of research focusing on teacher education reform in California.

Newmann, F., & Wehlage, G. (1995). *Successful school restructuring: A report to the public and educators*. Madison, WI: Center on Organization and Restructuring Schools.

This book synthesizes five years of research conducted by the Center on Organization and Restructuring of Schools (CORS), which used data from the School Restructuring Study (SRS), the National Educational Longitudinal Study of 1988, the Study of Chicago School Reform, and the Longitudinal Study of School Restructuring. The authors suggest that the recent education reform movement pays too much attention to changes in school organization that do not directly address the quality of student learning. They go on to suggest that student learning can meet high standards if educators and the public provide students with teachers who practice authentic pedagogy, schools that strengthen professional community, and supportive external agencies and parents. The authors recommend several structural conditions they suggest can enhance the professional community needed to promote learning of high intellectual quality, including shared governance, independent work structures, staff development, deregulation, small school size, and parent involvement.

Walker, A., Shafer, J., & Fortune, T.W. (2005). Preparing preservice teachers for English language learners: A content-based approach. In D. J. Tedick (Ed.) *Second language teacher education, international perspectives* (pp 313-333). Mahwah, N. J.: Lawrence Erlbaum Associates.

This chapter describes the evolution of a preservice K-12 teacher course on language-sensitive instructional practices for English language learners. Although most universities have only included this topic within foundations courses, the authors state that this material should be delivered in stand-alone courses. The course was designed as a seminar with students divided by level and content area, and thus instruction was tailored, allowing content area instructors to understand they are language teachers as well as content teachers. Key insights preservice teachers gained: 1) length of time ELLs need to demonstrate academic achievement on standardized tests, 2) difference between conversational and academic language proficiency, 3) belief that changes to instruction will benefit all students and thus ELLs are an asset, 4) use of L1 serves as bridge to L2 literacy, 5) a shift in thinking of language as a problem to language as a resource.

Higher Education Faculty

Costa, J., McPhail, G., Smith, J., Brisk, M. (2005) Faculty First: The Challenge of Infusing the Teacher Education Curriculum with Scholarship on English Language Learners. *Journal of Teacher Education*, 56(2), 104-118.

This article reports on a project to make teacher education faculty knowledgeable about needs of bilingual learners with the goal of incorporating relevant content in their courses, specifically their course syllabus. Teacher education faculty attended an institute during a semester and a summer seminar. Institute activities included readings and discussion on the sociopolitical climate of public education, school climate and classroom contexts that support all learners. Faculty also analyzed texts used in various school subject matters and discussed the language of these texts. Viewing and discussing videos and school visits as well as discussing specific changes in their syllabi were additional activities. The article concludes that change is local and the authors question the feasibility of replicability. The possibilities and tensions are specific to the university where the program took place.

Meskill, C. (2005). Infusing English language learner issues throughout professional educator curricula: The Training All Teachers project. *Teachers College Record*, 107(4), pp. 739-56.

The Training All Teachers project at the School of Education at SUNY Albany is a professional development project for IHE faculty to raise consciousness about the increased numbers of teachers who will have responsibility for ELLs. The training incorporated three formats. The first of these was a “push-in” model, where ELL experts sat in on faculty classrooms. The second consisted of a series of faculty workshops, and the third a set of peer presentations by graduate students with expertise in ELL issues. Topics covered in the trainings included: language and its socio-cultural context; language acquisition; cross-cultural issues in schooling; federal and state

regulations regarding ELL children; and methods of effective communication with children and parents. The paper examines in some depth the process of the training project and recaps discussions with both IHE faculty and students regarding their initial attitudes toward ELLs and their revisions of these attitudes as they participated in the training.

Preservice Teachers

Abbate-Vaughn, J. (2008). Highly qualified teachers for our schools: Developing knowledge, skills, and dispositions to teach culturally and linguistically diverse students. In M.E. Brisk (Ed.), *Language, Culture, and Community in Teacher Education* (pp. 175-202). New York: Lawrence Erlbaum Associates.

This chapter reports on a model of preservice teacher development that provides urban field experiences with two coursework strategies: process writing and reading, and discussing ethnic autobiographical literature. This approach brings preservice teachers close to CLD urban children and their families while they process their prior knowledge and understandings through reading, writing, and reflection. Bringing students and faculty close to CLD communities as well as reading and discussing autobiographical books from writers who were raised in similar communities has an impact on both faculty and students both generally unaware of the lives of students from such communities. Through process writing, participants kept revising their pieces as their views about CLD students changed. The chapter concludes with four policy recommendations: align coursework and fieldwork, require experiences in diverse settings, use coursework and fieldwork to help process conflicting views on diverse communities, and expand the knowledge required from preservice teachers to go beyond content knowledge to knowledge of learners.

Baca, L., & Escamilla, K. (2002). Educating teachers about language. In C.T. Adger, C.E. Snow, & D. Christian (Eds.), *What teachers need to know about language* (pp. 71-84). Washington, DC: Center for Applied Linguistics and Delta Systems.

This chapter is a response to Wong Fillmore and Snow's (2002) proposal that all teachers need to know about language to fully serve bilingual learners in their classes. Wong Fillmore and Snow recommend seven language-oriented courses: language development, language and cultural diversity, language and linguistics, sociolinguistics for educators in a linguistically diverse society, second language learning and teaching, the language of academic discourse, and text analysis and language understanding in educational settings. Baca and Escamilla consider adding seven courses to already packed programs impractical, and propose two possible solutions. First, they recommend coaching of faculty and teachers by well-trained specialists. Next, they would distribute the courses through the undergraduate, graduate, and professional development programs. They recognize that not all targeted teachers would take all the courses but at least they would have a chance to acquire some expertise.

One other issue raised in this chapter is the notion that K-12 standards include very little about language. Since districts attend to standards, work on this area could have important implications for teaching.

Bollin, G.G. (2007). Preparing teachers for Hispanic immigrant children: A service learning approach. *Journal of Latinos & Education*, 6 (2), 177-189.

This article draws on a preservice teacher tutoring program with English language learners to promote service learning with an immigrant population. The preservice teachers developed multiple perspectives, an appreciation of Hispanic culture, empathy and understanding of the challenges facing the immigrant families, an awareness of their own stereotypes, awareness of social injustice, and gained confidence in their ability to teach children from diverse backgrounds. This approach provides preservice teachers with direct experience that is applicable to real-life teaching environments, a challenge to possible latent racism and classism, and the opportunity to develop transferable skills and confidence.

California Council on the Education of Teachers. (2001). Success for English language learners: Teacher preparation policies and practices. *Teacher Education Quarterly*, 28(1), 199-208.

The paper presents the background of the California Standards for the Teaching Profession and makes recommendations for each standard. 1) To engage and support students: build on students' prior knowledge, life experience and languages and use the L1 as a bridge to L2. 2) To create an effective learning environment: encourage respect of non-English language and allow L1 use in class where appropriate. 3) Regarding subject matter: allow a bi-literacy model of instruction and development of native language literacy in the content areas. State policy should integrate grade level subject matter content with language to help students pass high stakes tests. 4) Regarding assessment: eliminate the mandate to test ELLs on English standardized tests until a predetermined literacy level in English or native language is achieved, and use tests for purposes developed. 5) Regarding professionalism: teachers should utilize and value staff/parents as language resources, and ongoing PD in working with ELLs should be offered.

Goodwin, L. (2002). Teacher preparation and the education of immigrant children. *Education and Urban Society*, 34 (2), 156-172.

This article looks at the issue of teacher preparation in light of changing demographics as a direct consequence of increased immigration. It outlines the following key issues that must be taken into account when preparing teachers to work effectively with immigrant children: understanding the complexity of immigrants' prior schooling, dislocation, cultural disorientation and language. Goodwin suggests that these factors demonstrate that learning English is more than an instructional concern. He recommends that all teachers develop knowledge in differentiating instruction, second language learning, and working with families and communities.

Rochon, R.S., Tanabe, C.S., & Horstman-Riphahn, T.H. (2008). "Does she speak English?" In M.E. Brisk (Ed.), *Language, Culture, and Community in Teacher Education* (pp. 175-202). New York: Lawrence Erlbaum Associates.

This chapter addresses the education of linguistically and culturally diverse teacher candidates, specifically Hmong. After information on Hmong people, their history and education, it briefly

describes a teacher education program and includes specific experiences that these candidates had once they became teachers. These teachers influenced the schools in a positive way by facilitating the communication with families of children from their cultural group, by making their colleagues knowledgeable and comfortable with the new culture they bring to school, and by embedding cultural differences throughout the curriculum, rather than just on “diversity week.” They also had to face difficult situations such as the need to prove themselves before being accepted by their colleagues, and the need to cope with the false assumptions that they can only serve their community rather than being considered capable teachers for all students.

In-service Teachers

Echevarría, J., Vogt, M., & Short, D. (2004). *Making content comprehensible for English language learners: The SIOP model* (2nd ed.). Needham Heights, MA: Allyn and Bacon.

Sheltered Instruction Observation Protocol (SIOP) is a program model which specifically focuses on the special language development needs of English Language Learners. The protocol prepares teachers to work collaboratively through the process of classroom observation, coaching, discussion and reflection. The text defines 30 indicators evident in high quality classroom instruction. These indicators are grouped into eight components which are viewed as being critical for delivering comprehensible input in content area subjects for ELLs. These are designated as preparation, building background knowledge, comprehensible input, strategies, interaction, practice/application, lesson delivery and review/assessment. The first chapter gives background knowledge of ELLs learning needs and explains sheltered instruction. The following chapters begin with a graphic organizer as overview of the content in that section. Each of the 30 indicators (content objectives, language objectives, scaffolding techniques, question types, etc) is discussed thoroughly and then demonstrated in several classroom vignettes. Opportunity for discussion, reflection and application of the protocol is provided throughout the text. The protocol is recommended for ESOL classrooms and content area subjects. The appendices include the observational protocol used to quantify an instructor’s use of effective sheltered instruction, lesson plans and review of research on SIOP. There are professional development materials (videos, training manuals) available for pre/in-service training.

Grant, E.A., & Wong, S.D. (2003). Barriers to literacy for language-minority learners: An argument for change in the literacy education profession. *Journal of Adolescent & Adult Literacy*, 46, 386-394.

This article argues that two barriers to literacy are the failure of teacher-education programs to adequately prepare reading specialists to work with language-minority learners and of education researchers to engage in more substantive research on English reading development for such students. Recommendations for reform include: adjusting TE programs to include courses on second language learning, including information on second-language learning in all reading courses, offering clinical experience with ELLs, promotion of teachers as advocates for bilingualism, modification of testing practices to ensure ELLs are not disadvantaged, development of collaborative research between ESL education faculty and literacy researchers, and the reassessment of personal and professional attitudes that negatively impact ELLs.

Kennedy, M. M. (1998). *Form and substance in in-service teacher education*. (Research monograph No. 13). Arlington, VA: National Science Foundation.

This paper reviews studies of inservice programs that aim to enhance mathematics and science teaching, focusing exclusively on studies that examine effects of programs on student learning. The review suggests that the differences among programs that mattered most involved content that was actually provided to teachers, rather than differences in program forms or structures.

Padrón, Y. N., & Waxman, H. C. (1999). Classroom observations of the Five Standards for Effective Teaching in urban classrooms with ELLs. *Teaching and Change*, 7, 79-100.

This article reports on a case study that examines the success of the five standards for effective pedagogy proposed by the Center for Research, Diversity, & Excellence (CREDE). They are: Teacher and students producing together; developing language across the curriculum; making meaning: connecting schools to students' lives; teaching complex thinking; and, teaching through conversation. Results indicate the treatment teachers' classroom instruction was better than the comparison teachers on some aspects of teaching (e.g. more explanations, more encouragement of extended student responses, more encouraging students to succeed). Students in the treatment classes reported a more positive classroom learning environment than students in the comparison classes. Students in the treatment classrooms had significantly higher reading achievement gains than students in the comparison classrooms.

Perez, S.A. (2000). Teaching second language learners in the regular classroom. *Reading Improvement* 37, 45-48.

This article describes three basic steps in adapting the language experience approach for second language learners. The first adaptation involves incorporating discussion around student's prior knowledge in relation to the text reading selection. The teacher can elect to lead the discussion as a whole class or have students work in pairs to read sections of text at a time to link students' prior experiences with the text. The second adaptation incorporates written language by recording or transcribing students' prior knowledge and experiences. The students are then able to match the experiences with the written representation. In this adaptation the teacher is encouraged to record key points made by the class. In the third adaptation, students review and reflect after reading sections of text. The author recommends that the teacher create open-ended questions to which the students can respond. Perez suggests teachers have students write their reflections to the text.

Téllez, K., & Waxman, H. C. (2005). *Effective professional development programs for teachers of English language learners. Spotlight on student success. no. 803*. Philadelphia, PA: Laboratory for Student Success (LSS), The Mid-Atlantic Regional Educational Laboratory.

This article spotlights four effective in-service professional development programs for teachers of English language learners (ELLs). Téllez and Waxman identify the growing need of school

districts to supplement pre-service teacher education programs and help prepare both new and veteran teachers that require more preparation in working with the ELL population. The four exemplary programs widely cited in the literature include Balderas Elementary in Fresno California, The Funds of Knowledge for Teaching program, Starlight Elementary in Watsonville, California, and the Puente Project. Téllez and Waxman suggest that these four exemplary programs work to help teachers of ELLs to gain a strong understanding of language acquisition and of the concept of communicative competence, and to know how language function forms the basis for ELL instruction. The programs emphasize that teachers must be content area experts as well as language teachers, able to deliver key ideas in English.

Timperley, H.S., & Phillips, G. (2003). Changing and sustaining educators' expectations through professional development in literacy. *Teaching and Teacher Education, 19*, 627-641.

This study conducted in Auckland, New Zealand examines the ways in which teachers' expectations of student achievement in eight schools located in two low-income communities changed over the course of 6 months' professional development in literacy. The authors also examined the changed expectations during the following year. Pre- and post-course questionnaires, follow-up interviews and observations ascertained changes in expectations and the teachers' feelings of self-efficacy. The authors discovered that a complex interplay of new knowledge, how to teach it and unanticipated changes in children's achievement helped to achieve changes in teachers' feelings of self-efficacy and in their expectations of students. They conclude that teachers' beliefs and improvement in their practice need to be addressed simultaneously in order for professional development to have a lasting effect on the expectations and achievement of low income children.

State and District-Level Professional Development

Professional Development: General

Cohen, D. K., & Hill, H. C. (1998). *Instructional policy and classroom performance: The mathematics reform in California* (RR-39). Philadelphia: Consortium for Policy Research in Education.

Using data from a 1994 survey of California elementary school teachers and 1994 student California Learning Assessment System (CLAS) scores, the authors of this study investigate the influence of assessment, curriculum, and professional development on teacher practice and student achievement. They suggest that under identified circumstances, policy can affect practice and both can affect student performance, and that successful instructional policies are themselves instructional in nature because teachers figure as a key connection between policy and practice.

Darling-Hammond, L. (1996). The quiet revolution: Rethinking professional development. *Educational Leadership, 53*(6), 4-10.

This paper piece examines a shift in thinking about the role and expertise of the classroom teacher, from a focus on "teacher-proof" texts and curricula toward a reconceptualization of the

teacher as an expert in both subject matter and learning and cognition. Darling-Hammond identifies several trends in teacher education related to this shift, including greater attention to learning and cognition in pre-service education; more emphasis on developing critical thinking skills in teachers; the emergence of professional development schools; and a trend toward standards and assessments to ensure high quality teachers. She goes on to pinpoint obstacles for an increased professionalization of the teacher workforce, including relatively low pay, low funding for teacher education, the tendency to fill teaching positions with teachers with substandard credentials, and “one-shot” in-service professional development. Her piece calls for “strategic investment in teacher competence” (p. 9).

Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass.

This book was sponsored by the National Academy of Education through its Committee on Teacher Education. The chapters examine teacher education curriculum through key concepts, pedagogies and common elements that represent the state-of-the-art standards for the teaching profession. The authors propose how to implement that knowledge within the classroom. In addition to strong subject matter knowledge, all new teachers should have a basic understanding of how people learn and develop, and how children acquire and use language. The book suggests that teaching professionals must be able to apply that knowledge in developing curriculum that attends to students’ needs and the demands of the content. It also attends to the social purposes of education: Teaching specific subject matter to diverse students, in managing the classroom, assessing student performance, and using technology in the classroom.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.

This study used a national probability sample of 1,027 mathematics and science teachers to provide a large-scale empirical comparison of effects of different characteristics of professional development on teachers' learning. The study identified three core features of professional development that have significant positive effects on teachers' self-reported increases in knowledge and skills and changes in classroom practice. The study also identifies structures that affect teacher learning.

Guskey, T. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press, Inc.

The author poses a five-level model for evaluating professional development to determine the value and worth of training programs. The first is participants' reactions to the training—whether they liked it or not. A second level is what new knowledge and/or skills participants gain from the training. A third level is organizational support and change. The fourth level is how the training influences what they do on the job. And the fifth level considers how the training affected their productivity.

Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.

This paper defines and describes what is meant by "professional learning community"; addresses what happens when a school staff studies, works, plans, and takes action collectively on behalf of increased learning for students; and reviews what is known about creating such communities of professionals in schools. The article suggests that professional learning communities can produce positive outcomes for both staff and students, such as reducing teacher isolation, increasing commitment to the mission and goals of the school, creating shared responsibility for the total development of students, creating powerful learning that defines good teaching and classroom practice, and enhancing understanding of course content and teacher roles. The author suggests that in order to develop a community of learners, schools must pull interested, willing people together; engage them in constructing a shared vision; develop trust and relationships; and nurture a program of continuous learning. The author also reviews a synthesis of five case studies and identifies factors of good leadership and elements of effective external support, and describes additional approaches that may lead to the invention of professional learning communities.

Kruse, S., Louis, K., & Bryk, A. (1994, Spring). *Building professional community in schools*. Madison, WI: Center on Organization and Restructuring Schools.

This article discusses some of the benefits that schools enjoy when they develop strong professional communities, and what conditions and resources make the development of those communities possible. Based on data collected from schools studied by the Center on Organization and Restructuring of Schools, the authors examine which resources and conditions seem to be most critical to sparking and sustaining such development.

Learning First Alliance. (2000). *Every child reading: A professional development guide*. Baltimore, MD: Association for Supervision and Curriculum Development.

In this guide, the Learning First Alliance calls for a radical departure from the one-session professional development, publisher-funded workshops that were typical of the past. It presumes that the end goal of learning to read is to comprehend and that continuous improvement in the practical skills of each component of reading instruction is a goal of every competent teacher. It assumes that improvement in teaching is a life-long enterprise that requires mentoring, observation, follow-up evaluation, and problem solving with peers. Improved teaching is most likely to occur within a supportive, collaborative context that allows sufficient time for understanding of new ideas and approaches.

The guide recommends the following conditions for a child to succeed: Everyone who affects student learning is involved; student standards, curricular frameworks, textbooks, instructional programs and assessments are closely aligned with one another; professional development is given adequate time and takes place in school as part of the workday; the expertise of colleagues, mentors, and outside experts is accessible and engaged as often as necessary in professional

development programs; strong instructional leadership is present; and, there is commitment to a long-range plan with adequate funding.

McLaughlin, M., Talbert, J. E., Gilbert, S., Hightower, A. M., Husbands, J. L., Marsh, J. A. et al. (2002). *Domains of district action: A framework for assessing district reform strategies*. Center for the Study of Teaching and Policy: Stanford University.

This paper reports on an investigation of the teaching policies and practices of eight public school districts from Fall 1998 through Spring 2001. The sample included a large urban district in each of four states – CA, NY, NC, and WA – and four mid-sized districts in the San Francisco Bay area. The districts were selected for their relatively proactive reform orientation within these reform-oriented states. The longitudinal case studies and cross-case comparisons revealed seven “domains of action” in which a district can leverage and support—or imperil—education improvement efforts. Comparisons of reform strategies across the eight sites revealed differences in how districts go about the work of improving teaching and learning, often choosing one of the seven domains as a primary lever of change and typically neglecting some other domains with detrimental results. The domains are as follows:

1. Improving teaching and learning.
2. Developing the profession through ongoing learning opportunities.
3. Partnering with non-system actors through collaborative relationships.
4. Responding to exogenous policy and accountability mechanisms at state and federal levels.
5. Allocating resources for ongoing principal and teacher learning and instructional support.
6. Communicating within and beyond the system to build shared reform goals and understandings of the knowledge base.
7. Creating local systems of accountability, including norms of shared responsibility and assessment instruments that are aligned with the district’s definition of teaching and learning.

National Council for Accreditation of Teacher Education (NCATE). (2007). *The NCATE Unit Standards*. Retrieved November 26, 2007 from <http://www.ncate.org/documents/standards/UnitStandardsMay07.pdf>

This document describes the six NCATE Unit Standards designed to identify the knowledge, skills, and professional dispositions expected of educational professionals, and form the basis for the on-site review conducted by NCATE’s Board of Examiners team. The standards also identify the organizational structures, policies, and procedures that should be in place to support candidate learning of these expectations. Further, each of the six standards contains three components, including the language of the standard itself, rubrics that delineate the elements of each standard and describe three proficiency levels (unacceptable, acceptable, and target) at which each element is being addressed, and a descriptive explanation of the standard. NCATE Unit Standards apply to initial teacher preparation and advanced programs, including off-campus, distance learning, and alternate route programs, and online institutions and non-higher education organizations offering programs for the professional preparation of educators. This document also includes a glossary that provides definitions of words and phrases in the standards that are used in ways unique to professional education.

National Staff Development Council (2001). *NSDC standards for staff development*. Fairfield, OH: Author.

The standards provide direction for designing a professional development experience that ensures educators acquire the necessary knowledge and skills. The development of the standards (revised in 2001 from the 1995 original) was guided by three questions:

- What are all students expected to know and be able to do?
- What must teachers know and do in order to ensure student success?
- Where must staff development focus to meet both goals?

In addition to their standards, NSDC publishes a wide range of guidelines and information on staff development, including recommendations on resources, leadership, evaluation, research and an annotated bibliography. The *context* standards address learning communities, leadership, and resources. The *process* standards require that staff development be data-driven, evaluated, research-based, well designed, address learning, and be collaborative. The *content* standards call for equity, quality teaching, and family involvement

Rueda, R. (1998). *Standards for professional development: A sociocultural perspective*. Santa Cruz, CA: Center for Research in Education, Diversity, and Excellence.

This research brief examines the five standards for effective teaching proposed by the Center for Research on Education, Diversity & Excellence (CREDE). They are: joint productive activity, language and literacy development, contextualizing teaching and learning, complex thinking, and instructional conversation. The author poses that these standards can also be applied to professional development activities. The principles that describe effective teaching and learning for students in classrooms should not differ from those for adults in general and teachers in particular. The author discusses the five standards in terms of sociocultural theory and explains how each standard can support the learning process underlying professional development efforts.

Zmuda, A., Kuklis, R., & Kline, E. (2004). *Transforming Schools: Creating a Culture of Continuous Improvement*. Alexandria, VA: ASCD.

The authors explain how to use systems thinking to move a school or school system toward a continuous improvement model for professional growth. A hypothetical school and imaginary (but realistic) dialogues ground the theory for the reader. Each chapter begins with Essential Questions and Operating Principles to focus thinking and to understand the actions that are critical to professional growth. The chapters end with Summing Up and Looking Ahead, a summary and set of questions to help participants focus on local issues and concerns and to encourage action.

This book would be a great help to school leaders or anyone responsible for professional development of mainstream teachers. It provides a clear map for engendering long-term change. It is most appropriate for school leaders at the system, district, or school level (persons with decision-making authority) rather than for teachers.

Professional Development: ELL Focus

Brisk, M. E. (Ed.) (2008). *Language, Culture, and Community in Teacher Education*. New York: Lawrence Erlbaum Associates.

The purpose of this volume is to address the preparation of teachers and teacher educators to serve culturally and linguistically diverse (CLD) students with particular focus on language. Part I, *Knowledge*, explores existing knowledge about the populations addressed in this volume. Part II, *Practice*, documents various efforts in teacher education to work with teacher candidates and with teacher education faculty. Part III, *Policy*, describes efforts of state and federal policies as well as professional organizations to address language and culture needs in their recommendations for teacher preparation.

Clair, N. (1995). Mainstream teachers and ESL students. *TESOL Quarterly*, 29, 189-196.

Included in the Brief Reports and Summaries section of the *TESOL Quarterly*, Clair reports on a year-long qualitative study which focused on three teachers with ELLs in their classrooms. All three had different numbers of ELLs and had participated in various configurations of traditional professional development (transmission model) focused on enhancing their teaching ELLs. All believed that the professional development training was ineffective. It had not provided any of them with the “quick fixes” they were looking for to address the challenges of teaching ELLs. Clair proposes several explanations for this search for quick fixes, which she found to be pervasive among teachers.

In place of traditional professional development offerings, Clair recommends teacher study groups. These encourage productive growth as teachers delve into complex issues, work together to analyze and solve problems, and critically engage and reflect.

Clair, N. (Autumn 1998). Research and Practice in English Language Teacher Education. *TESOL Quarterly*, 32(3), 465-492.

This article reports on the outcome of a year-long study by two study groups to explore new ways of working with teachers of ELLs. The study finds that Teacher Study Groups (TSGs) offer a sustained professional development opportunity by providing teachers time to critically reflect, problem solve and collaborate to explore issues of teaching and learning.

Clair, N., & Adger, C. T., (1999). *Professional development for teachers in culturally diverse schools*. Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Identifier: ED435185). Retrieved on Dec. 13, 2007, from <http://www.cal.org/resources/digest/profdvpt.html>

This ERIC digest focuses on professional development for teachers in culturally diverse schools. It summarizes what is known about effective professional development and the conditions that allow it to succeed. It provides three examples of professional development that are grounded in

the academic achievement of English language learners as a fundamental ingredient to overall school success. Although different in form and focus, the examples highlight ongoing professional development that promotes school-based inquiry and continual improvement. Each example brings together ESOL, bilingual and content teachers or interdisciplinary teams of teachers to support the academic success of all students. The examples describe the following settings: The International High School at LaGuardia Community College; California Tomorrow and Alisal High School; and The Northeast and Islands Regional Educational Laboratory and The Lowell (MA) Public Schools.

Crawford, J., & Krashen, S. (2007). *English learners in American classrooms: 101 questions, 101 answers*. New York: Scholastic.

This book uses a question and answer format to address the concerns of educators about responding to the needs of English language learners, and encourages professionals seeking to do the best they can for ELL students to learn the dimensions of demographic and cultural change in recent years, master the pedagogies that work for ELL students, and the scientific basis of these principles. After providing a concise but comprehensive introduction, the authors address 11 topic areas, including students, programs; research, heritage languages, criticisms of bilingual education, public opinion, legal requirements, assessment and accountability, politics of language, history, and language policy. Each section contains questions, for a total of 101 questions in all. References are grouped according to the question posed.

Cummins, J. (1994). Primary language instruction and the education of language minority students. In Bilingual Education Office (Ed.), *Schooling and language minority students: A theoretical framework* (2nd ed., pp. 3-46). Los Angeles: California State University, National Evaluation, Dissemination and Assessment Center.

This article provides a framework for intervention to address underachievement among minority students, taking into account not only psychoeducational factors but also the negotiation of power in educational settings. The author reviews research data supporting three theoretical principles that are central to program planning for language minority students, including the conversational/academic language proficiency principle, the linguistic interdependence principle, and the additive bilingualism enrichment principle. The author suggests that intervention to reverse school failure requires interactions between students and educators that are empowering for both, especially through the incorporation and valuing of students' languages and cultures.

de Jong, E. J., & Harper, C.A. (2005). Preparing mainstream teachers for English language learners: Is being a good teacher good enough? *Teacher Education Quarterly*, 32(2), 101-124.

This article presents a framework that identifies areas of expertise necessary for mainstream teachers to be prepared to teach in classrooms with native and non-native English speakers. The authors first examine the gap between good teaching practices for fluent English speakers and effective practices for English language learners (ELLs) as derived from assumptions about language and literacy development, and explore this knowledge and skill gap in the domain of

culture. They then propose a framework that describes the knowledge and skills teachers must have in addition to what they acquire through regular teacher preparation, suggesting that mainstream teachers must develop the knowledge, skills, and dispositions that reflect an awareness of the process of learning a second language, the role of language and culture as a medium in teaching and learning, and the need to set explicit linguistic and cultural goals.

Díaz-Rico, L. T. (2008). *A course for teaching English learners*. New York: Pearson.

This book offers strategies designed to equip teachers to work with English language learners, balancing fundamental principles with practical classroom techniques. The book provides background principles underlying the cultural, linguistic, and socio-cultural contexts and foundations of learning, along with a variety of classroom methods for English language development in listening, speaking, reading, writing, and computer-assisted instruction.

Díaz-Rico, L. (2008). *Strategies for teaching English Language Learners (2nd ed)*. Boston: Pearson Education.

This volume offers an overview of basic principles, practices and methods that provide a broad foundation for educating ELLs. It includes such topics as the influence of culture on schooling, the cultural practices of schooling and the sociopolitical context of education. The book is designed to increase teachers' effectiveness in expanding ELLs' access to the core curriculum, instructing all students with a rich and demanding curriculum, and making crosscultural connections by means of teaching practices and curricular content.

Echevarria, J. & Short, D. J. (1999). *The Sheltered Instruction Observation Protocol: A tool for teacher-research collaboration and professional development*. Retrieved February 28, 2008 from <http://www.cal.org/resources/digest/sheltered.html>

The purpose of the research project was to develop an explicit model of sheltered instruction that teachers could use to improve the academic success of their Limited English Proficient (LEP) students. In this project, researchers used the Sheltered Instruction Observation Protocol (SIOP) model to train middle school teachers to implement effective sheltered strategies in their classes in four large urban school districts (two on the east coast and two on the west coast). English language learners represented 22-50% of the total population at the project schools, and their proficiency levels ranged from beginning to advanced. Teachers used sheltered instruction in a variety of settings, such as traditional English as a second language (ESL) classes, content-based ESL classes, and sheltered content classes.

Eisenhower Mathematics and Science Consortia and Clearinghouse Network (2005). *What experience has taught us about professional development: Facilitating mathematics and science reform: Lessons learned*. National Network of Eisenhower Regional Consortia and Clearinghouse.

This document is intended as a primer on selecting or delivering high-quality professional

Development, reflecting the literature base and the cumulative knowledge of the 10 members of the Eisenhower Regional Mathematics and Science Education Consortia program. The report covers a number of topics, including an overview of what constitutes professional development, addressing how people learn and the nature of mathematics and science, building content and pedagogical content knowledge and skills, and using research-based methods that reflect those needed in the classroom. The report also discusses facilitating the development of professional learning communities, supporting teacher leadership, integrating professional development with local and state priorities and systems, and continuously evaluating effectiveness. The authors conclude by providing a list of logistical and planning issues, and discuss areas for future research.

Francis, D.J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). *Practical guidelines for the education of English language learners*. Portsmouth, NH: Center on Instruction.

Booklet one of this three-part series provides evidence-based recommendations for policymakers, administrators, and teachers in K-12 settings who seek to make informed decisions about instruction and academic interventions for ELLs. The domains of focus include reading and mathematics, and the recommendations apply to both a class-wide instructional format and individualized, targeted interventions, depending on the population and the goals of instruction. Booklet two addresses adolescent newcomers and booklet three focuses on the use of accommodations in large-scale assessments (see “Assessment” for annotation on the third booklet).

Gonzalez, J. M. & Darling-Hammond, L. (1997). *New concepts for new challenges: Professional development for teachers of immigrant youth*. McHenry, IL: Delta Systems and CAL.

This book describes the challenges to developing a teacher force that is competent to work with immigrant students. In four chapters, the authors propose rethinking professional development and move far from traditional in-service and teacher training. They propose a framework that teachers of immigrant youth need to understand about their students, plus a description of the professional development experiences that are likely to facilitate those understandings. They also describe the type of teacher education program and school setting that are able to best support ongoing learning. They argue that professional development needs to occur in pre-service education; during induction, when new teachers are adjusting to being part of the staff of a school; and, throughout the teachers’ careers. They describe structures and practices for professional development, focusing on those that promote community, collegiality, and collaboration. The book also illustrates profiles of innovative approaches to pre-service and in-service professional development in California, Maryland, Minnesota, and New York.

Gottlieb, M., Cranley, M. E., & Oliver, A.R. (2007). *Understanding the WIDA English language proficiency standards: A resource guide*. Madison, WI: Board of Regents of the University of Wisconsin. Retrieved March 31, 2008 from http://www.wida.us/standards/Resource_Guide_web.pdf.

This Resource Guide, intended to be used with the 2007 WIDA English Language Proficiency (ELP) Standards, is designed to provide teachers and administrators with tools to aid in the design of curriculum, instruction, and assessment for ELLs. Specifically, it organizes and consolidates information from a variety of sources, offering lists of social and academic content-based example topics, Speaking and Writing Rubrics; and CAN DO.

Jameson, J. (2002). *Professional development for bilingual and ESL paraprofessionals: The Aspire curriculum*. McHenry, IL and Washington, DC: Delta Systems and Center for Applied Linguistics.

This Trainer's Manual includes a wealth of user-friendly and research-based materials for four workshops designed to prepare paraprofessionals working with ESOL students to support instruction. Jameson created these workshops on the principle that paraprofessionals bring a wealth of experiences and knowledge to the classroom that can positively affect the learning of ELLs. The manual contains easy to follow presenter's notes with clear goals and information about materials needed. Photocopiable handouts and transparency masters are included for each workshop. The workshops contain strategies for assisting teachers effectively as well as for working with ELLs. The workshop sessions are designed to be used while paraprofessionals are working so that they can collaborate with teachers and try some of the strategies with ELLs.

This is an excellent resource for professional development of paraprofessionals and should help to enhance the teacher-paraprofessional partnership so that the educational experience of ELLs can be improved.

Honigsfeld, A. & Cohan, A. (2006). *Lesson study meets SIOP: Linking two successful professional development models*. Retrieved December 19, 2007 from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/d0/39.pdf.

The project focus was to implement two professional development models in tandem with "Transition-to-Teaching" teachers who work with ELLs. One model is the Japanese lesson study approach and the other is the SIOP (Sheltered Instruction Observation Protocol). Twenty-two members of the Intensive Teacher Institute (ITI) were working towards certification in New York State. As part of their teacher preparation, they received training in the two models and were invited to form collaborative inquiry teams to implement a three phase approach using this merged protocol. Both qualitative (triangulation) and quantitative (descriptive statistics) data were collected. Results yielded positive results for enhancing teaching and learning of ELLs. However, teachers seemed to utilize the SIOP model more exclusively. According to the participants, time constraints negatively affected implementing the collaborative inquiry method of the Japanese study lesson model.

Peregoy, S. F., & Boyle, O. F. (2008). *Reading, writing, and learning in ESL: A resource book for K-12 teachers* (5th ed). New York: Pearson Education.

This book provides teaching ideas for promoting oral language, reading, and writing development in English for K-12 English language learners. The book provides background information on English learners, including the impact of culture on learning; an overview of first and second language acquisition theories as they relate to students, classrooms, and teaching practices; a model of effective English learner instruction and assessment; teaching and assessment strategies in oral language development for beginning and intermediate English learners; early literacy development; writing, reading, and literature study; and content learning. The authors also include an in-depth view of reading assessment and its application to instructional decision making. Each chapter contains a short introduction and guiding questions, classroom examples and vignettes, an annotated bibliography of recommended readings, and a list of discussion questions and activities.

Reyes, A. (2006). Reculturing principals as leaders for cultural and linguistic diversity. In K. Téllez & H.C. Waxman (Eds.) *Preparing quality educators for English language learners* (pp. 145-56). Mahwah, NJ: Lawrence Erlbaum.

This chapter examines the research on school leadership, the research on the effects of school leadership on successful programs for ELLs, the role of principal preparation, and offers recommendations on ways that principal preparation programs can prepare school leaders to be leaders for English language learners. The authors examine the University of Houston Urban Principals Program as a case study, and discuss challenges to changing such programs.

Richard-Amato, P. A., & Snow, M. A. (1992) *The multicultural classroom: Readings for content-area teachers*. Reading, MA: Addison-Wesley.

This book provides conceptual and practical ideas designed to assist content-area teachers who have students with limited English proficiency in their classrooms. Intended for both preservice and in-service teachers, the book includes edited readings selected from the work of experienced content-area and language teachers, applied linguists, and researchers. Readings cover the theoretical foundation for successful teaching in multicultural classrooms, cultural considerations that must be taken into account, pedagogical strategies and management issues across the content areas, and how these strategies and issues can apply to specific content areas. Each chapter ends with questions and activities designed for individual reflection and work, or for whole-class or small- group work in teacher-training programs.

Snow, M. A., Ed. (2000). *Implementing the ESL Standards for Pre-K-12 Students through Teacher Education*. Alexandria, VA: Teachers of English to Speakers of Other Languages (TESOL).

This edited volume is designed to assist both in-service and pre-service teachers, as well as teacher trainers, in implementing Pre-K-12 ESL student standards in their respective classes. Centering around a range of themes dealing with the implementation of the standards, the book provides a history of the standards, diversity in schools, the role of SLA, curriculum development, and assessment. Laid out as both a student text and a reference, it includes a

variety of additional resource information such as Web sites and an extensive glossary, as well as a number of teacher tasks to examine issues in further detail.

Suttmiller, E. F., & González, M. L. (2006). Successful school leadership for English language learners. In K. Téllez & H.C. Waxman (Eds.) *Preparing quality educators for English language learners* (pp. 167-88). Mahwah, NJ: Lawrence Erlbaum.

This chapter combines findings from field studies and research that address the issues of school leadership and its impact on the successful schooling of English language learners. The authors present leadership in terms of a supportive model, proposing a framework that enables schools to create successful schooling experiences for all students. They also profile a school situated along the U.S.-Mexico border that they suggest exemplifies the model's components and their applications to practice.

Teachers of English to Speakers of Other Languages (TESOL). (2001). *Integrating the ESL Standards Into Classroom Practice: Grades 9-12*. Alexandria, VA: Author.

This second volume in a four-part series is designed to instruct teachers of Grades 9-12 how to use and integrate TESOL's ESL standards into classroom practice. The book covers six units, including exploring world religions; using story to compare, conclude, and identify; the scientific method and experimental design; writing for a statewide proficiency test; autobiographical writing; and creating a community of social studies learners. Each unit is designed to be adaptable to different grade levels and contexts and includes suggestions for how teachers might adapt them to other classroom situations. The book also includes a helpful glossary of instructional techniques and user's guide.

Teachers of English to Speakers of Other Languages (TESOL). (2006). *PreK-12 English Language Proficiency Standards*. Alexandria, VA: Author

Using TESOL's 1997 publication *ESL Standards for Pre-K-12* as a building block, this book is designed to expand the scope and breadth of ESL content standards by connecting language to the specific core curriculum content areas of English language arts, mathematics, science, and social studies; valuing students' native languages and cultures as the foundation for developing academic language proficiency; acknowledging the social and intercultural aspects of language development; and providing an organizational structure that is synchronized with U.S. federal legislation. The book also provides extensive matrices elucidating sample performance indicators, organized by the five standards (targeting language in social/intercultural interactions, language arts, mathematics, science, and social studies) and grade-level cluster (PreK-K, 1-3, 4-5, 6-8, and 9-12). The matrices are formed by the interaction of the five language proficiency levels (starting, emerging, developing, expanding, and bridging) with each language domain (listening, speaking, reading, and writing).

Téllez, K., & Waxman, H. C. (Eds.). (2006). *Preparing quality educators for English language learners. Research, policies, and practices*. Mahwah, NJ: Lawrence Erlbaum Associates.

This book seeks to respond to teacher quality issues as they relate to English learners: What kind of teacher is best suited to teach ELs? What do effective teacher recruitment programs look like? What do the contents of pre-service and in-service professional development look like? What are the additional training needs of teachers of ELs? How can we expand teacher quality to all school staff (administrators, counselors, etc.)? What pathways can be established to promote teacher quality? The authors emphasize that instructional improvements cannot be achieved via curriculum alone—teachers are key to improving the education of this large and growing population of students.

Téllez, K., & Waxman, H. C. (2005). *Quality teachers for English language learners: A review of the research*. The Laboratory for Student Success, The Mid-Atlantic Regional Educational Laboratory at Temple University Center for Research in Human Development and Education. Retrieved November 27, 2007 from <http://www.temple.edu/Lss/pdf/ReviewOfTheResearchTellezWaxman.pdf>

This review of the research on the quality of teachers of English language learners frames teacher quality around several important "levels," and then examines the structural factors central to teacher quality. The review briefly explores the role teacher education has played in the development of English language development (ELD) teachers and the recently developed standards for ELD teachers. Legislative and policy issues are reviewed, and the knowledge base for ELD teaching is discussed. Research is reviewed in across several topic areas, including general studies of teacher quality, preservice teacher education, inservice teacher education, standards for ELD teachers, legislative and policy issues, teacher verbal ability and its potential relationship to quality ELD instruction, pedagogical strategies, and cultural knowledge.

Verplaetse, L. S. & Migliacci, N. (eds) (2008). *Inclusive pedagogy for English language learners*. New York: Lawrence Erlbaum Associates.

The purpose of this volume is to provide educators and educational leaders sound recommendations concerning research-informed best practices for ELLs. The authors consulted leading researchers, teacher educators and expert practitioners in compiling the volume. The book is composed of four sections:

1. Elementary Classroom - Discusses educational practices that engage all learners, including ELLs, with a focus on literacy development.
2. Secondary Classroom - Addresses the unique challenges facing teachers and adolescent language learners mainstreamed in the content classroom.
3. School and Community Collaboration – Provides insight into what schools might and must do to create the types of community linkages necessary if schools are to genuinely reflect the communities where they live and serve.
4. School and District Reform – Explores the question of what entire schools and systems must do to educate and graduate all of their students. It recognizes that ELLs are not only the fastest-growing population, but that they can also provide unique learning opportunities to non-ELL students.

Waldschmidt, E. D., Dantas-Whitney, M., & Healey, D. (2003). Creating hybrid communities of support: Pre- and in-service teachers working together. In T. Murphey & K. Sato (Eds.), *Communities of supportive professionals*. Vol. 4, Professional Development in Language Education Series. (pp. 77-89). Alexandria, VA: Teachers of English to Speakers of Other Languages.

The authors describe a broad-based inclusive 5-year professional development program that served approximately 300 elementary and secondary mainstream teachers (pre-service and in-service) annually at several sites (university and local schools). Project activities were varied: workshops (district and university), action research, study groups, graduate ESOL courses, online discussion forum, project mailing list, website, newsletter, and materials grants. They offer four processes they found to be critical in forming successful teacher learning communities: (1) provide a structure for flexible participation, (2) offer opportunities for sustained involvement, (3) validate local experience, and (4) be aware of competing forces. This study, and in particular the recommendations that grew out of it, could be extremely useful for anyone designing or implementing professional development for mainstream teachers.

Walqui, A. (2001). Accomplished teaching with English learners: A conceptualization of teacher expertise. *The Multilingual Educator*, 2(2), 51–56.

This article discusses what it is that accomplished teachers of ELLs know and are able to do so as to work successfully with these learners. The author uses a model of teacher understanding and expertise that enables the reader to establish rich and focused conversations about the complexities of teaching linguistically diverse students. The knowledge and skills required are not just of a technical nature, but include personal, social and political aspects of a teacher's professional life and context.

Williams, J. (2001). Classroom conversations: Opportunities to learn for ESL students in mainstream classrooms. *The Reading Teacher*, 54, 750-757.

Williams calls for losing the negative or deficit view of ELLs and for focusing instead on their strengths. Drawing from research on literacy skill development, Williams defines concepts and summarizes research on academic language, instructional conversations and extended classroom discourse, academic growth, and creating community. She offers specific instructional suggestions for mainstream teachers.

Resources for Mainstream Teachers of ELLs

Second Language Acquisition

Adger, C. T., Snow, C. E., & Christian, D. (Eds.). (2002). *What teachers need to know about language*. McHenry, IL and Washington, DC: Delta Systems and Center for Applied Linguistics.

Snow and Fillmore outline what they believe all teachers need to know about language in their roles as communicator, educator, evaluator, educated human being, and agent of socialization. Arguing that teacher education programs do not arm future teachers with the basic linguistic knowledge needed to educate all students, Snow and Fillmore supply this essential information. The question-response format makes the linguistic content seem less abstract. The subsequent chapters, written by educators from fields that Snow and Fillmore's suggestions would greatly impact, consider the challenges of integrating or adding this proposed content.

This volume would be of most use in teacher education programs and in some professional development settings. The Snow and Fillmore chapter could be used as a guide for enhancing basic linguistic knowledge within already existing courses, or the entire book could be used as a text in a variety of courses.

Akhavan, N. (2006). *Help! My kids don't all speak English: How to set up a language workshop in your linguistically diverse classroom*. Portsmouth, NH: Heinemann.

Akhavan, an experienced classroom teacher and administrator, guides teachers through the process of creating effective language workshops that support ELLs within the elementary classroom. The guide explains theoretical underpinnings of language workshops, second language acquisition, and vocabulary development; provides instructions on implementing a language workshop; and offers suggestions on how to adapt language workshop to a variety of settings. Akhavan includes numerous descriptions and examples of activities that are standards-driven and highly engaging. Throughout this book, Akhavan encourages appreciation and acceptance while building important literacy skills, all in a teacher-friendly format.

This book would be a helpful resource for mainstream teachers, particularly those in early childhood and elementary.

Anstrom, K. (August 1998). *Preparing secondary education teachers to work with English language learners: (All areas)* NCBE Resource Collection Series, 10. Retrieved December 17, 2007 from <http://www.ncela.gwu.edu/pubs/resource/ells/language.htm>

A series of reports that address the relevant literature and practices for linguistically and culturally diverse learners in English language arts, mathematics, science and social studies. The reports are intended to provide mainstream content teachers an understanding of how to design instruction, from strategies to assessment, to meet the needs of ELLs while addressing the national content standards. Recommendations are made for providing pre-service and in-service teachers background in teaching a multi-cultural student population beyond an additional course in culture or linguistics.

Bialystok, E. (2007). Cognitive effects of bilingualism: How linguistic experience leads to cognitive change, *International Journal of Bilingual Education and Bilingualism*, 10 (3) , 210-223.

Unlike monolinguals, bilingual individuals control two sets of linguistic representations. In this paper, Ellen Bialystok hypothesizes that the cognitive processes associated with the control and manipulation of these systems can be exploited across a variety of cognitive tasks and might give bilinguals an advantage over monolinguals in specific tasks. In particular, she suggests that bilinguals are more likely to be practiced at tasks which involve simultaneous attention to one set of cues while inhibiting or suppressing a second set of cues, in the same way that bilinguals are practiced at accessing one set of linguistic representations while inhibiting the second. Reviewing the literature on bilingualism and development, she finds that for young children, there is a consistent set of findings which suggest that bilingual children “develop the ability to control attention and ignore misleading information earlier than monolinguals” (p. 215).

Brisk, M. E. (2006). *Bilingual education: From compensatory to quality schooling* (2nd Edition). Mahwah, NJ: Lawrence Erlbaum Associates.

This book sets forth the premise that bilingual education per se is not good or bad but is greatly influenced by the quality of the school context, curriculum, and instruction. The initial chapter provides a framework for defining success in bilingual education. The recommendations in this book provide a comprehensive basis for planning, developing, improving, and evaluating bilingual programs. They are dissected into discrete points with respect to the whole school, the curriculum, and the classroom for clarity, but they need to be applied in a holistic way because they depend on each other. To carry out specific classroom practices (chapter 6) teachers need curricula (chapter 5) that adhere to the same principles and a supportive school environment (chapter 4). The amount of difficulty involved in the implementation of specific recommendations depends on personal and external factors influencing bilinguals (chapter 3) and the current and historical context of the United States (chapter 2). The concluding chapter synthesizes the contents of the book and illustrates how the recommendations in the book were used to develop a bilingual program.

Brisk, M.E., Burgos, A. & Hamerla, S. (2004). *Situational context of education: A window into the world of bilingual learners*. Mahwah, NJ: Lawrence Erlbaum Associates.

This book proposes that the objective study of the situational context of education benefits students, their families, and their teachers. Knowledge of the situational context gives a more realistic view to students and teachers of what they need to do to progress in school. This understanding should be productive and should not lead to feelings of sympathy or a lowering of educational expectations. Rather, it should lead to useful solutions. Each chapter focuses on one situational factor in the order that pilot lessons were implemented: linguistic, economic, social, cultural, and political. The chapters begin with a rich description of the implementation of one of the lessons in a fifth grade bilingual classroom, followed by a theoretical explanation of each factor. This research can serve as the basis for lesson objectives, and each chapter includes a few sample lessons.

Cary, S. (2007). *Working with second language learners: Answers to teachers' top ten questions*. Portsmouth, NH: Heinemann.

Ten questions (which form the book's chapters) come from teachers and are heard often across the United States. Cary aligns real classroom contexts with challenging issues. He provides suggestions for addressing these challenges, also presented within the context of a classroom description or a recounting of the mentoring process.

Chamot, A. U., Barnhardt, S., El-Dinary P.B., & Robbins, J. (1999). *The learning strategies handbook*. White Plains, NY: Addison Wesley Longman.

The learning strategies handbook is aimed particularly at teachers of second or foreign languages, although the book is appropriate for a wider audience. It focuses on the explicit instruction of learning strategies as a means to more effective language teaching. The goal of the book is "to assist students in developing awareness of their own metacognition" (p. 2) using what the authors dub CALLA, or the Cognitive Academic Language Learning Approach. CALLA is a method which breaks teaching into five explicit steps: preparation; presentation; practice; (self) evaluation; and expansion.

Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. Reading, MA: Addison-Wesley.

A strong case for teaching academic language skills while simultaneously learning content and acquiring English is made in this accessible book. Chamot and O'Malley have provided the foundation for understanding the Cognitive Academic Language Learning Approach (CALLA) and the tools for putting it into classrooms. The book is divided into three parts: Introducing CALLA, Establishing a CALLA Program, and Implementing CALLA in the Classroom.

The book answers many specific questions that are raised by teachers and administrators as they strive to meet the educational needs of ELLs. In many instances, this information is placed in text boxes, charts, and tables. Chamot and O'Malley have done an excellent job responding to educator uncertainty, breaking tasks down to manageable steps, and providing resources for implementation.

Collier, V. (1994). Acquiring a second language for school. *Directions in Language & Education*. 1 (4). DC: National Clearinghouse for Bilingual Education.

This article presents a conceptual model of second language acquisition through the school curriculum based on a review of research over the past 25 years in linguistics, education, and the social sciences. Considering the relationships between sociocultural, linguistic, academic, and cognitive processes, the model aims to explain the many complex interacting factors that the school child experiences when acquiring a second language during the school years, especially when that second language is used in school for instructional purposes across the curriculum. Though the article focuses on examples of the language minority student from a home where a language other than the dominant language of the society is spoken and is being schooled in a second language for at least part of the school day, the author suggests that the model may also be applied to the language majority student who speaks the dominant language and is being schooled in a bilingual classroom. Recommendations for educators are also included.

Dragan, P. B. (2005). *A how-to guide for teaching English language learners in the primary classroom*. Portsmouth, NH: Heinemann.

Written by an experienced early childhood classroom teacher and informed by her own experiences as a second language learner of Spanish, this guide provides clear and theoretically sound activities to encourage and support English language learners as they learn English and become active participants in the K-3 classroom. The book begins with suggestions on how to create a classroom that welcomes all students and encourages second language acquisition. Particularly useful for novice teachers or teachers with little experience teaching ELLs is the chapter providing suggestions for the first 20 days of schools (“Getting Started Teaching ELLs—A Look at the First Twenty Days of School”).

Dragan interweaves succinct explanations of supporting research, theories, and ELL resources with suggested activities, making this how-to guide a superior resource for the busy classroom teacher. The final chapter “Connecting with Families” gives suggestions for including families in the school and in literacy building activities. This book would be an extremely helpful and informative teacher resource book.

Echevarria, J., & Graves, A. (2006). *Sheltered content instruction: Teaching English language learners with diverse abilities* (3rd ed.). Boston: Allyn & Bacon.

An excellent introduction to the concept of Sheltered Content Instruction, this book is thorough, accessible, and research-based. It provides the theoretical underpinnings for sheltered instruction, describes the SIOP Model, and offers descriptions of activities to use when sheltering content at various grade levels and in a variety of subjects. Each chapter has Activities that provide additional hands-on practice with the introduced concepts and activities for in-service teachers new to sheltered instruction or pre-service teachers. A list of References is also included with each chapter.

This book is an excellent textbook for university teacher training courses and is an important resource book to have available in schools.

Portland, OR Public Schools. *The ESL/Bilingual education resource guide for mainstream teachers*. Retrieved on Dec. 13, 2007, from http://www.pps.k12.or.us/curriculum/PDFs/ESL_Modifications.pdf

This online resource contains accurate information that would be useful to mainstream teachers, but the content is not extensive. The content is presented in printable handouts: information on language acquisition and teacher tip sheets. The most useful handout is Essential Tips for K-12 Mainstream Teachers. It’s easy to access format makes it helpful to harried teachers who need resources at their fingertips.

The information contained in the handouts is good advice, but with little explanation of how to accomplish the suggestion. The handouts could be useful as a discussion starter in peer-to-peer mentoring.

Faltis, Christian J. & Coulter, Cathy A. (2008). *Teaching English learners and immigrant students in secondary schools*. Upper Saddle River, NJ: Prentice Hall.

Current research-based teaching and learning principles are the foundations for establishing academic communities and creating identity with second language learners. The authors provide extensive information on setting up effective and successful programs for immigrant students in secondary schools. The first section presents the historical background of educational policy in regards to English Language Learners (ELLs) and bilingual education. The second section focuses on various content area subjects such as Language Arts, Math, Social Studies and Science. For each content area, the authors discuss how to create a community of learners, foster collaboration and integrate English language development. Classroom vignettes are included to give the reader concrete examples of strategies and activities successfully implemented in classrooms with immigrant students. The last section covers the issues of assessing ELLs in content area classes and for program identification and classification. Reflection and questions are interspersed throughout the text which provides an opportunity to make connections with the text.

Fillmore, L. W., & Snow, C. E. (2002). *What teachers need to know about language*. Washington, DC: ERIC Clearinghouse of Languages and Linguistics. Retrieved on Dec. 13, 2007, from <http://faculty.tamu-commerce.edu/jthompson/Resources/FillmoreSnow2000.pdf>

This book derives from a conversation among educators concerning how teacher preparation programs address language and literacy development. It is argued that a greater understanding of language development and acquisition is needed to help teachers meet the needs of students. Chapters include: What Teachers Need to Know about Language, Language and Early Childhood Programs, Educating Teachers about Language, Teacher Knowledge about Language, Incorporating Linguistic Knowledge in Standards for Teacher Performance, and Preparing Teachers to Guide Children's Language Development.

Flynn, Kathleen & Hill, Jane (2006) *Classroom instruction that works with English language learners*. Alexandria, VA: MCREL, ASCD.

Provides the mainstream classroom teacher with background knowledge on instructional strategies that have been effective in producing student achievement and how these strategies can be modified for use with ELLs. Chapters include: What is Classroom Instruction that Works?, The Stages of Second Language Acquisition, Setting Objectives and Providing Feedback, Nonlinguistic Representations, Cues, Questions, and Advance Organizers, Cooperative Learning, Summarizing and Note Taking, Homework and Practice, Reinforcing Effort and Providing Recognition, Generating and Testing Hypotheses, Identifying Similarities and Differences, and Involving Parents and the Community.

Freeman, D. E., & Freeman, Y. S. (2001). *Between worlds: Access to second language acquisition (2nd ed.)*. Portsmouth, NH: Heinemann.

This book provides background on the theories and practices of second language acquisition as well as the social, political and cultural factors that influence student learning. The book is divided into three sections that reflect the authors' belief that these elements interact to influence ELL performance in school: The World Inside the School, The World Outside the School, and Bringing the Worlds Together.

Freeman, D. and Freeman, Y. (2007). *English language learners: The essential guide (Theory and practice)* New York, NY: Scholastic Teaching Resources.

Freeman and Freeman provide a practical guide for mainstream teachers of English Language Learners providing strategies for integrating language and content. Strategies include: teaching through thematic units, academic vocabulary instruction and authentic reading and writing experiences examined through scenarios across the grade levels.

Freeman, Y.S. and Freeman, D.E. (2004). *Essential linguistics: What you need to know to teach reading, ESL, spelling, phonics, and grammar*. Portsmouth, NH: Heinemann.

This book can be used as pre-service or in-service text for teachers needing a better understanding of language structures and language development. Elements of linguistics are presented in a comprehensible manner and are followed up with practical applications to the classroom. The authors initially present a generic overview of linguistic concepts and follow up by addressing specific issues related to ELLs.

Genesee, F., Lindholm-Leary, K., Saunders, W. M., & Christian, D. (2006). *Educating English language learners. A synthesis of research evidence*. New York: Cambridge University Press.

Researchers from the Center for Education, Diversity, and Excellence, or CREDE, examine outcomes for students with limited or no proficiency in English in selected U.S. schools. The book examines K-12 students' acquisition of oral language skills in English, their development of literacy (reading and writing) skills in English, instructional issues in teaching literacy, and achievement in academic domains (i.e., mathematics, science, and reading). The authors reviewed a number of studies of two-way bilingual education and other types of programs where children are in primary language instruction for many years. It concluded that more primary language instruction for a greater portion of children's schooling careers leads to higher levels of ELLs' school success. The large body of research reviewed suggests that literacy and other skills and knowledge transfer across languages. If you learn something in one language—such as decoding, comprehension skills, or a concept such as democracy—you either know it or can more easily learn it in a second language. However, the research reviewed says little about how to accelerate progress in English language development among ELLs or which approach is most effective in this regard.

Grognet, A., Jameson, J., Franco, L., & Derrick-Mescua, M. (2000). *Enhancing English language learning in elementary classrooms*. McHenry, IL and Washington, DC: Delta Systems and Center for Applied Linguistics.

This professional development program designed to prepare teachers to work effectively with English language learners includes a Trainer's Manual, a Study Guide, and videos of actual classrooms with ELLs. The Trainer's Manual is a 3-ring binder containing the following: Workshop-at-a Glance with the Goal and Performance Objectives for each section; the Presentation with Purpose, Materials, and Instructions (script is provided); and Transparencies. This manual is a thorough resource that can reduce the time needed for workshop development, although the presenter still needs to spend time becoming familiar with the materials and activities in order to lead a dynamic workshop. Reading the script would provide the basic information but would not engage teachers sufficiently. The Study Guide provides a wealth of activities to enhance teacher knowledge and to provide example of classroom activities.

Overall, this program is a useful resource for professional development, either in part or whole, when an informed, well-prepared presenter leads the sessions and supplements and expands from personal experience while ensuring that teachers are actively engaged in activities.

Hadaway, N., Vardell, S. & Young, T. (2002) *Literature-based instruction with English language learners*. Boston, MA: Allyn & Bacon.

This textbook explores content-based instruction for ELLs. The textbook is divided into four sections: *Beginning the Journey*, looking at the increase in ELLs in the classroom, language acquisition and literature based instruction. The second section, *Growing in Language Ability* looks at the development of the different language modalities. The third section *Responding to Culture and Literacy* provides rationales for using multicultural literature, folklore and poetry with ELLs. The last section *Exploring Content* examines literacy learning and academic vocabulary development through the use of Non-Fiction and Literature Instruction. This book provides strategies, activities and references for teaching language through content.

Harper, C. & de Jong, E. (2004). Misconceptions about teaching English-language learners. *Journal of Adolescent and Adult Literacy*, 48 (2), 152-162.

This article addresses misconceptions that arise from equating the process of learning a first language with that of a second language. Particular learning needs of ELLs are examined and such as explicit language instruction and the opportunity for interactive practice in order to complete academic tasks.

Helmer, S., & Eddy, C. (2003). *Look at me when I talk to you: ESL learners in non-ESL classrooms* (2nd ed.). Toronto, Canada: Pippin.

Although it is a slim volume, this book delivers a critical message to teachers about how cultural issues affect communication and person interactions. It provides an often overlooked aspect of

communication. The book first considers ELLs as individuals, reminding teachers that ELLs on the same proficiency level may operate very differently in the classroom, even if they share the same first language. Then, the role of coverbal and nonverbal communication within communities is discussed, and followed by ELLs and schooling. The book closes with a look at values and beliefs and how these can be seen in the reactions and interactions of ELLs.

This book addresses important cultural issues without becoming too abstract or polemic. It would be appropriate for professional development or for individual personal growth. Because of its importance, accessibility, and succinctness, the book would also be a good choice for a teachers' book discussion group.

Herrell, A., & Jordan, M. (2004). *Fifty strategies for teaching English language learners* (2nd ed.) Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

The second edition of this popular handbook of effective teaching strategies is aligned with the TESOL (2007) *ESL Standards for Pre-K-12 Students*. A 1-page table summarizes the standards addressed in each of the fifty strategies, making it easier for teachers to incorporate standards in their planning. The book is divided into five sections: Theoretical Overview, Strategies for Enhancing Instruction Through Planning, Strategies for Supporting Student Involvement, Strategies for Building Vocabulary and Fluency, and Strategies for Building Comprehension. An Informal Multiple Intelligences Survey is also included.

Each of the fifty focus lessons includes a list of the TESOL Standards addressed by the lesson, a succinct introduction with supporting research or justifications for the lesson, step-by-step instructions (brief, but complete), applications and examples of the lesson in elementary and secondary settings, a conclusion, and references. Examples and visuals are provided in text boxes to clarify and support the lesson activities. This book is a rich resource for mainstream teachers to use when planning lessons.

Herrera, S., & Murry, K. (2005). *Mastering ESL and bilingual method: Differentiated instruction for culturally and linguistically diverse (CLD) students*. Boston: Allyn and Bacon.

This text presents methods, strategies, insights and reflection in addressing the needs of culturally and linguistically diverse (CLD) students. The text is divided into three parts: Hallmarks of Accommodative Instruction, Accommodation Readiness, and Professionalism in Practice. Best Practices included in section III are: integrated content instruction, sheltered instruction, the cognitive academic language learning approach (CALLA), and standards driven instruction.

Houk, Farin. (2005). *Supporting English language learners: A guide for teachers and administrators*. Portsmouth, NH: Heinemann.

Farin's book is a basic resource for educators who need to establish a program for English Language Learners. The information in this book renders a general overview of creating a context to deploy a school wide program for ELLs, setting up a classroom delivery model and

becoming advocates for linguistic minority students. Each chapter addresses a specific topic related to programmatic implementation. For example, separate sections address school climate, staff development, classroom environment, assessment and policy development.

Institute of Education Sciences. (2006). *Vocabulary improvement program for English language Learners and their classmates*. Retrieved December 19, 2007 from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/29/e1/60.pdf.

Vocabulary Improvement Program (VIP) is a 4-days-per-week/15 week vocabulary development program with the goal of increasing understanding of targeted vocabulary found in weekly assigned readings. The program was developed for English Language Learners (ELLs) as well as native speakers of English. The 142 subjects in the study were 5th grade ELLs in 16 different classrooms in three states. The study included intervention and comparison groups. The findings were presented in three domains: reading and math achievement and English language development. Results indicated that the VIP program had potentially positive effects for reading achievement but no discernible effects for English language development.

Hiebert, E.H. & Lubliner, S. (forthcoming). The nature, learning, and instruction of general academic vocabulary. To appear in S.J. Samuels & A. Farstrup (Eds.), *What research has to say about vocabulary*. Newark, DE: International Reading Association.

General academic vocabulary has often been identified as an obstacle for many students, especially those who are economically disadvantaged and depend upon schools to become literate. The reasons for this challenge may lie in the abstract content of much of this vocabulary and the shifts in meaning of these words show in different conceptual contexts. Attention to general academic vocabulary has the potential for being a particularly productive area of instruction and learning since many of these words belong to rich morphological families. This chapter develops four topics related to general academic language: 1) defining general academic language relative to other types of academic language; 2) describing general academic language through the lenses of two corpora; 3) reviewing research on the learning and instruction of morphology and cognates; and 4) suggesting applications and extensions of this review on general academic vocabulary for educators and researchers.

Lightbown, P.M. & Spada, N. (1993). *How Languages are Learned*. Oxford: Oxford University Press.

Lightbown and Spada's text is aimed primarily at second and foreign language teachers, but would sit comfortably in a course aimed toward mainstream teachers. The text is well organized and includes a glossary of specialist terms, as well as questions for reflection and other active learning opportunities liberally scattered throughout. The final substantive chapter applies the theoretical explorations of the previous four to classroom application. The authors look at classroom settings which tend toward more or less naturalist approaches, and propose five stances on classroom teaching, each of which emerges from a particular theoretical standpoint.

Each stance is examined in turn, and research which either supports or argues against particular classroom practices is summarized. The authors are agnostic in their approach but generally tend to favor communicative approaches. The final chapter also lists myths and misconceptions surrounding language learning. At a scant six pages, this final chapter would constitute a good stand-alone introduction for complete novices to the issue.

Marzano, R. J. (2007). *The art and science of teaching. A comprehensive framework for effective instruction*. Alexandria, VA: Association for Supervision and Curriculum Development.

The author presents a research-based protocol for the classroom. The proposed protocol moves away from the lock-step routine to a macro strategy that guides teaching for getting students to deeply interact with new knowledge. He offers a framework as a model and recommends that every school or district should develop on its own using his as a starting point.

His comprehensive model is articulated in the form of 10 design questions: What will I do to establish and communicate learning goals, track student progress, and celebrate success? What will I do to help students effectively interact with new knowledge? What will I do to help students practice and deepen their understanding of new knowledge? What will I do to help students generate and test hypotheses about new knowledge? What will I do to engage students? What will I do to establish or maintain classroom rules and procedures? What will I do to recognize and acknowledge adherence and lack of adherence to classroom rules and procedures? What will I do to establish and maintain effective relationships with students? What will I do to communicate high expectations for all students? What will I do to develop effective lessons organized into a cohesive unit?

McLaughlin, B. (1993). *Myths and misconceptions about second language learning: What every teacher needs to unlearn*. Santa Cruz, CA: National Center for Research on Cultural Diversity and Second Language Learning. Retrieved on Dec. 13, 2007, from <http://www.ncela.gwu.edu/pubs/symposia/reading/article6/mclaughlin93.html>

In this short essay, Barry McLaughlin debunks five commonly held misconceptions with regard to second language acquisition. The first of these is that children learn second languages more quickly and easily than adults. The second is that younger children necessarily learn faster than older children. McLaughlin summarizes research which indicates otherwise, allowing that the acquisition of phonology may be a possible exception. The third misconception is that greater exposure to and use of the L2 always increases the rate of acquisition – in fact, McLaughlin shows that a mixture of L2 and L1 use in the educational setting appears to be more effective. The fourth is that fluency in speech is equivalent to language acquisition, a misconception which misses the critical differences between fluency in spoken language and mastery of the written forms. The final misconception addresses differences in learning styles and strategies, due both to cultural difference and to difference in individual learning styles. The piece is accessible and readable and suitable for an audience with little to no previous background in the field of second language acquisition.

Nation, P. & R. Waring. (1997). Vocabulary size, text coverage and word lists. In: Schmitt, N. and M. McCarthy (eds). *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press. 6–19.

The basic theme of the chapter is that teachers need to have clear, sensible goals for vocabulary learning. It provides a literature review that addresses the following questions: How much vocabulary does a second language learner need? How many words are there in English? How many words do native speakers know? How many words are needed to do the things a language user needs to know? How much vocabulary and how should it be learned? What vocabulary does a language learner need? What are the characteristics of a word frequency list?

Rea, Denise and Mercuri, S. (2006). *Research-based strategies for English language learners: How to reach goals and meet standards, K-8*. Portsmouth, NH: Heinemann.

Teachers are faced with growing numbers of ELLs in mainstream classrooms while simultaneously being held accountable to standards-based curricula and high stakes tests. This book provides some insights and suggestions for working with ELLs in K-8 mainstream classrooms. The selected strategies are noted for high frequency use and effectiveness. Chapter 1 presents the constructivist view of learning, and subsequent chapters focus on specific instructional scaffolds that promote teacher modeling, contextualizing, metacognition, and reframing of information. The authors explain each strategy, why it is used and give concrete examples in various academic content instruction. The final chapter presents the importance of teaching language to ELLs in order to develop BICS and CALP, vocabulary and language goals for all lessons.

Reed, B., & Railsback, J. (2003). *Strategies and resources for mainstream teachers of English language learners*. Portland, OR: Northwest Regional Educational Laboratory.

This handbook contains information on important ELL-related topics critical for mainstream teachers: ELLs in the content of NCLB, Instructional Methods and Program Models, second language acquisition, and general principles for teaching ELLs. The chapters are brief, to the point, and easy to understand. Sufficient and appropriate content is provided, making it more likely that mainstream teachers will read and use this handbook. Descriptions of real classrooms are included, along with an extensive list of print and online resources.

An excellent resource that should be in the hands of every mainstream teacher for ongoing use, this handbook could also serve as the basis for a professional development program.

Reiss, J. (2005). *Teaching content to English language learners: Strategies for secondary school success*. New York: Pearson Longman.

In the preface, Reiss describes the book as “...light on theory, jargon, and technical terminology” with the goal of providing secondary teachers of math, science, and social studies the practical tools needed to make their content accessible for ELLs. The book offers suggestions and visuals, and places them in actual settings to demonstrate how and when to integrate them.

Every secondary ELL teacher could benefit from this book, but especially those teaching math, science, and social studies. It could be used in a professional development setting, with a secondary content department or a small study group, or function as an individual resource book.

Reiss, J. (2008). *102 content strategies for English language learners: Teaching for academic success in grades 3-12*. Upper Saddle River, NJ: Prentice Hall.

This resource of classroom strategies cites researched-based best practices in second language acquisition. The text consists of three parts. The initial section provides the theoretical foundations and discusses the relationship of culture to the processes of content instruction. The second part presents different types of instructional strategies that have been classroom-tested with ELLs. The concept of each strategy is presented along with an objective, rationale and practical implementation. Strategies include how to build background knowledge, present new materials, check for comprehension and reinforce learning. The final section addresses how to separate language from content in progress monitoring and assessment, creating alternative tests and preparing ELLs for standardized tests.

Reyes, S. A., & Vallone, T. L. (2008). *Constructivist strategies for teaching English language learners*. Thousand Oaks, CA: Corwin Press.

Aimed for mainstream and bilingual teachers, ESL specialists, principals, and teacher leaders, this book provides in-depth and culturally responsive classroom examples and grade-level connections to help readers apply constructivist methods in teaching ELLs. Designed for inclusive classrooms with diverse student backgrounds and abilities, this practical guide examines perspectives on second language acquisition and learning; program models for ELLs; instructional practices informed by critical pedagogy; and examples of constructivist classroom programs.

Richard-Amato, P. A., & Snow, M. A. (2005). *Academic success for English language learners: Strategies for K-12 mainstreaming teachers*. Pearson Education, Inc., White Plains, NY: Longman.

Produced for a target audience of practicing educators, this 483 page text includes articles written by well known professionals in the area of second language acquisition. This anthology is comprised of four sections; theoretical considerations, sociocultural issues and implications, classroom instruction and assessment and readings in specific content areas. Passages contain information pertinent to elementary and secondary teachers. The theoretical section includes articles on language acquisition and academic achievement. Part II, Sociocultural Issues, has four articles pertaining to language, culture and diversity. The next section spotlights curriculum, instruction and assessment. The final section includes articles relating to specific content areas and comprehensible instruction for ELLs. Each chapter ends with questions and projects for reflection and discussion.

Rolstad, K., Mahoney, K., & Glass, G. (2005). The big picture: A meta-analysis of program effectiveness research on English language learners. *Educational Policy*, 19(4), 572–594.

A major conclusion presented in this review of seventeen studies is that bilingual education programs proved to be more successful in assisting English Language Learners (ELLs) than an English-only program model. It also reported that within the realm of bilingual programs, developmental models were “superior” to transitional bilingual programs. The conclusion acknowledged the success of bilingual programs in fostering higher student achievement. It further suggested that bilingual educational programs continue to grow and develop in our educational institutions.

Rothenberg, C. & Fisher, D. (2007). *Teaching English language learners: A differentiated approach*. Upper Saddle River, NJ: Prentice Hall.

This book addresses the core principles of learning and makes recommendations of how to use these appropriately with English Language Learners (ELLs) to develop language proficiency in all four skill areas. A wide range of topics such as language acquisition, lesson planning and delivery, assessment, academic language and differentiated instruction are discussed in the text. Each section has focus questions, related research, spotlight on instruction, application to practice, a case study and references. Each section contains numerous teaching and learning strategies effective with ELLs. Specific recommendations are given for math, social studies and science teachers on how to integrate language and content. Reproducible teacher tools such as graphic organizers, academic word lists, English/Spanish cognates are included.

Scarcella, R. (2005). *Teaching the language of school: How all teachers can support English language learners*. Symposium conducted at the meeting of the Office of English Language Acquisition’s Celebrate Our Rising Stars Summit, Washington, DC. Retrieved April 30, 2008 from http://www.ncela.gwu.edu/oela/summit2005/presentations/RobinScarcella_generalModifiedFinal.pdf

This PowerPoint presentation provides an overview on teaching English in schools, with a focus on how teachers can better meet the needs of their English language learners. The 96-page presentation covers vast ground, including a background on English language learners’ performance in schools, specific problem areas, academic English vs. informal English, skill areas overview, and a linguistic overview, sociolinguistics, and a number of clinical examples. The presentation also provides recommendations for teachers and specific research-based instructional practices.

Schleppegrell, M. J. (2004). *The language of schooling: A functional linguistics perspective*. Mahwah, N. J.: Lawrence Erlbaum Associates.

This book discusses how language is used in the context of schooling, demonstrating that the variety of English expected at school differs from the interactional language that students use for social purposes outside of school. Designed to enable researchers and students of language in

education to recognize how the grammatical and discourse features of the language of schooling construct the content areas, role relationships, and purposes and expectations of schools, the book also provides a functional description of the kinds of texts students are expected to read and write at school, relates research from other sociolinguistic and language development perspectives to research from the systemic functional linguistics perspective, and focuses on the increasing linguistic demands of contexts of advanced literacy (middle school through college). It also analyzes the genres typically encountered at school, with extensive description of the grammatical features of the expository essay, and argues for more explicit attention to language in teaching all subjects, with a particular focus on what is needed for the development of critical literacy.

Short, D. J. (1993). Assessing integrating language and content instruction. *TESOL Quarterly*, 27, 627-656.

Short addresses the issue of assessment in integrated language and content instruction and provides a framework for organizing assessment objectives. A matrix of assessment alternatives and rationale of a variety of alternative assessments is provided that separate language issues from content area objectives.

Cross Cultural Communication

Atunéz, B. (2000). When everyone is involved: Parents and communities in school reform. In *Framing effective practice: Topics and issues in educating English language learners*. Washington, DC: National Clearinghouse for Bilingual Education. Retrieved February 20, 2008 from <http://www.ncele.gwu.edu/pubs/tasynthesis/framing/framing.pdf>

This chapter in the NCELA Technical Assistance Synthesis focuses on the role of parent and community involvement in the education of English language learners. The author addresses the importance of such involvement, barriers to it, and ways to support increased involvement, including several examples and common strategies. The author also provides a case study of the San Francisco Unified School District efforts to improve parent and community involvement among its ELL communities.

Banks, J. A. (2004). Multicultural education: Historical development, dimensions, and practice. In J. A. Banks & C. A. McGee Banks (Eds.) *Handbook of research on multicultural education* (2nd ed.) (pp. 3-29). San Francisco, CA: Jossey-Bass, 3-29.

In addition to reviewing the history of multicultural education, Banks presents the five basic dimensions of the field: Content Integration, Knowledge Construction, Prejudice Reduction, Equity Pedagogy, and Empowering School Culture and Social Structure. He then carefully analyzes the implications of each dimension for research and practice. Banks is the most

prominent developer of the field, and this chapter captures his vision of its main principles, practices and challenges.

Berriz, B. R. (2002). Connecting classroom and community through the arts and oral narrative. In Z. F. Beykont (Ed.), *The power of culture: Teaching across language difference* (pp. 147-163). Cambridge, MA: Harvard Education Publishing Group.

The author reports on several ways teachers in three settings are teaching across the cultural and linguistic divide. She first discusses specific strategies used in one teacher's elementary school classroom to integrate academic content, the arts, and oral narrative through the Family Map and the Family Story Quilt. She then discusses her observations of a series of literacy workshops and bookmaking projects involving middle school students with limited formal education and their families, along with innovative efforts that connect classroom learning and community knowledge at the high school level.

Fox, H. (1994). *Listening to the world: Cultural issues in academic writing*. Urbana, IL: National Council of Teachers of English.

This book explores why students from other cultures often find it difficult to learn academic writing and understand its purpose in a U.S. university. The book discusses how these students' writing is influenced by cultures where people communicate indirectly and holistically, value the wisdom of the past, and downplay the individual in favor of the group. Drawing upon systematic conversations and interviews with students from Asia, Latin America and Africa, the book looks at what happens to undergraduate and graduate students – some of them mid-career professionals who are published writers in their own countries – when they try to modify their writing and thinking styles to produce analytical papers in the Western context. The book addresses the difficulties on both sides with sustained and empathetic focus on underlying cultural differences, noting that the dominant communication style of the U.S. is highly valued “by only a tiny fraction of the world's peoples.”

Moll, L., Amanti, C., Neff, D., & González, N. (2005). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. In N. González (Ed.) *Funds of knowledge: Theorizing practices in households and classrooms* (pp. 71-88). Mahwah, NJ: Lawrence Erlbaum Associates.

This chapter summarizes the authors' qualitative studies of household and classroom practices in working class, Mexican communities in Tucson, Arizona. The authors present an example of research between a classroom teacher and an anthropologist, highlighting details of their visit to a household and the teacher's development of an instructional activity based on their observations. The authors conclude that it is feasible and useful to have teachers visit households for research purposes, can further develop their pedagogy, and help establish a new relationship with students' parents.

Tileston, D. W. (2004). *What every teacher should know about diverse learners*. Thousand Oaks, CA: Corwin Press.

Tileston provides a guide for classroom teachers working with diverse learners to close the achievement gap for minority students. Topics include: understanding diversity, recognizing bias and selecting teaching strategies that address the specific needs of diverse learners. A checklist for teachers working with diverse learners in the classroom is provided.

Literacy

Barron, V., & DiCerbo, P. (2006). *In the classroom: A toolkit for effective instruction of English learners, Grade level content 7-12 Secondary*. Retrieved March 5, 2008 from <http://www.ncela.gwu.edu/practice/itc/secondary.html>

The Secondary section of NCELA's "In the Classroom" Toolkit, which aims to make research-based lessons, activities, and curriculum accessible to all teachers of English language learners (ELLs), whether within bilingual education, ESL, or English-only settings, covers a number of academic areas and provides tools for each. Specifically, the authors summarize literacy and language arts development, including developing English vocabulary, oral language development, narrative and expository texts, working with a textbook, and academic writing; content area skills and inquiry; and assessment. They also provide a number of tools and activities with detailed instructions designed for teachers to target each area.

Calderón, 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.

This book aims to provide educators with a comprehensive and empirically-tested framework for developing literacy skills and accelerating language development among English language learners called Expediting Comprehension for English Language Learners (ExC-ELL). Designed for a wide audience that includes middle and high school teachers of English, science, math, and social studies, middle and high school principals, literacy coaches, and content curriculum specialists, the book includes a number of practical resources, including lesson templates, rubrics, sample lesson plans in mathematics, science, language arts, and social studies, descriptions of successful programs, and professional development designs.

Cassady, J. K. (1998). Wordless books: No-risk tools for inclusive middle-grade classrooms. *Journal of Adolescent & Adult Literacy*, 41, 6. 428-432.

This article describes how wordless books can help struggling and reluctant readers of all ages, stages of cognitive development, and content areas, linguistically and culturally different readers, and in cross-age tutoring programs. The author discusses the teacher's role in using wordless books, suggesting that, because of their visual appeal and lack of words, such books ensure successful reading experiences because they enhance creativity, vocabulary, and language development. The author also suggests that the creativity stimulated by wordless books encourages older students to look more closely at story details, to carefully consider all story elements, and to more clearly understand how text is organized so that a story develops.

Colorín Colorado. (2007). *Using cognates to develop comprehension in English*. Retrieved April 11, 2008 from <http://colorincolorado.org/article/14307>

This article discusses classroom strategies for teaching cognates to Spanish-speaking ELLs. In addition to presenting a general overview of cognates, the article discusses reading aloud and student reading strategies, along with follow-up activities such as word sorting, circling differences, identifying false cognates, and exaggerating intonation and stress. The article also provides a useful table of common Greek and Latin roots that are cognates in English and Spanish.

Gersten, R. Baker, S.K., Shanahan, T., Linan-Thompson, S., Collins, P., & Scarcella, R. (2007). *Effective literacy and English language instruction for English learners in the elementary grades: A practical guide* (NCEE 2007-4011). Washington DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee>.

This IES Practice Guide presents the views of an expert panel which conducted a review of the research on literacy development for K-5 ELLs. The panel presents five recommendations, four of which conform to the criteria of the What Works Clearinghouse. 1) Screen for reading problems and monitor progress; 2) Provide intensive small-group reading interventions; 3) Provide extensive and varied vocabulary instruction; 4) Develop academic English; and 5) Schedule regular peer-assisted learning opportunities.

Carlo, M.S., August, D., McLaughlin, B., Snow, C.E., Dressler, C., Lippman, D.N., et al. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. *Reading Research Quarterly*, 39(2), 188–215.

Study addresses the impact of explicit vocabulary instruction on reading outcomes for English Language Learners (ELLs). Strategies included explicit instruction of academic vocabulary using context, morphology, knowledge about multiple meanings, cognates and strategies for inferring word meaning. The study found that interventions involving teaching about words were effective in improving reading comprehension outcomes for both ELLs and English Only (EOs).

Fitzgerald, J. & Graves, M. F. (2004). *Scaffolding reading experiences for English language learners*. Norwood, MA: Christopher-Gordon.

Teachers may use this text as a resource for developing lessons through a process of scaffolded instruction for pre, during and after reading. It presents the research behind scaffolded instruction and the positive results of increased comprehension in English Language Learner's (ELLs.) The book provides information on how to work with ELLs and guides the teacher to create effective lessons that will specifically address areas of need for ELLs. Concrete examples illustrate how to help ELLs learn content and reinforce literacy development.

Graham, S., & Perin, D. (2007). *Writing Next: Effective strategies to improve writing of adolescents in middle and high schools*. New York: Carnegie Corporation of New York.

As noted by the authors, every day 7,000 students drop out of high school, many because they lack the basic literacy skills to meet the growing demands of the curriculum. Because the definition of *literacy* includes both reading and writing skills, poor writing proficiency should be recognized as an intrinsic part of this national literacy crisis. This report offers a number of specific teaching techniques that research suggests will help 4th-to-12th-grade students. It targets all students, not just those who display writing difficulties, although this latter group is deservedly the focus of much attention. The report's premise is that all students need to become proficient and flexible writers. It identifies eleven elements of current writing instructions found to be effective for helping adolescent students learn to write well and to use writing as a tool for learning. All of the elements are supported by rigorous research, though even when used together they do not constitute a full writing curriculum.

Institute of Education Sciences. *What Works Clearinghouse*. Retrieved April 30, 2008 from <http://ies.ed.gov/ncee/wwc/reports/topic.aspx?tid=10>.

The What Works Clearinghouse (WWC) reviews for English Language Learners focus on interventions for students in grades K-6 that are intended to increase skills in reading achievement, mathematics achievement, or English language development. Interventions are separated by subject area, and the website includes the review protocol that were used.

Samway, K. D. (2006). *When English language learners write: Connecting research to practice, K-8*. Portsmouth, NH: Heinemann.

This book applies the findings from research on second language writing conducted by university researchers and classroom teachers to writing instruction for ELLs. It intersperses explanations of research with visuals of writing samples to enhance understanding of the findings. The book also presents detailed sketches of the writing development of five ELLs, and includes graphic and text samples of their writing. It addresses the influence of gender, race, ethnicity, and social class on writing development. The author also examines the intersection of reading and writing development and on integrating reflective writing practices into the classroom.

Stephens, E. & Brown, J. (2005). *A handbook of content literacy strategies: 125 practical reading and writing ideas*. Norwood, MA: Christopher Gordon Publishing.

The authors identify the issues related to content literacy such as the need to continue with literacy instruction after elementary school, going beyond the textbooks and integrating content literacy strategies into the every day lessons through an instructional framework. The hands-on strategies show how to integrate literacy in many subject areas to help students increase their comprehension and thinking skills. This updated version of content literacy strategies includes fifty additional strategies plus additional chapters pertaining to dealing with struggling readers.

Walqui, A. & DeFazio, A.J. (2003). *The selection of written text for English learners in Teaching Reading to Adolescent English Learners*. San Francisco, CA: WestEd.

This article focuses on how understanding text adaptation leads to more appropriate text selection for English learners. Understanding what makes a text comprehensible is a necessary part of deciding which texts to choose for second language learners. More specifically, this article examines three key points: 1) what makes text comprehensible for ELLs? 2) how can these principles inform text selection for ELLs? and 3) How can required essential texts be made more accessible to ELLs?

Social Studies

Irvin, J. (2002). *Reading strategies for the social studies classroom*. Austin, TX: Holt, Rinehart and Winston. Retrieved December 30, 2007 from http://go.hrw.com/hrw.nd/gohrw_rls1/pKeywordResults?ST2Strategies

This web site is an online materials resource to assist teachers to implement ten reading strategies to increase comprehension of content area text. The strategies covered are Previewing Text, Understanding Text, Using Graphic Organizers, Constructing Concept Maps, Visualizing Information, Building Background Information, Making Predictions, Activating and Using Prior Knowledge, Anticipating Information, Developing Vocabulary Knowledge. Each section begins with a descriptive overview of the target strategy and explains its use in the context of social studies. Next is a strategic action plan, which clearly and thoroughly lists each step to introduce, implement and practice the strategy with students via a selected piece of American history or World History text. Sample text and student worksheets are included for each strategy, as well as answer keys and discussion guidelines.

This is a resource of research-based strategies to develop content literacy in struggling and reluctant readers. Strategies include: previewing text, using graphic organizers, constructing concept maps, visualizing information, building and using background knowledge, making predictions/anticipating and developing academic vocabulary.

Short, D. (2002). Language learning in sheltered social studies classes. *TESOL Journal*, 11(1), 18-24.

This article addresses the results of a study of sheltered social studies classrooms that showed that the area of language learning, explicit vocabulary development and other language learning strategies received the least attention. A framework is provided for explicit instruction through a Language-Content-Task (LCT) format that includes explicit teaching of language functions needed across the content areas, academic vocabulary, content concepts, and procedures for completing tasks to develop academic literacy.

Science

Amaral, O. M., Garrison, L., & Klentschy, M. (2002). Helping English learners increase achievement through inquiry-based science instruction. *Bilingual Research Journal*, 26(2), 213-239.

The study examined the impact of four-year professional development intervention in promoting science and literacy with predominantly Spanish-speaking elementary students as part of a district-wide local systemic reform initiative in a rural school district. The five areas of emphasis in this NSF-supported, district-wide local systemic reform initiative included high quality curriculum, sustained professional development and support for teachers and school administrators, materials support, community and top-level administrative support, and program assessment and evaluation. The inquiry-based science program started with 14 pioneer, volunteer teachers from two school sites. As the program progressed, more teachers and sites were added to the program until the program became available to all teachers at all elementary schools in the school district. Over four years, teachers were provided with at least 100 hours of professional development designed to deepen their understanding of science, address pedagogical issues, and prepare them to teach science at their grade level. Teachers also received in-classroom professional support from a cadre of resource teachers, and complete materials and supplies for all the science units.

Ballenger, C., & Rosebery, A. S. (2003). What counts as teacher research? Investigating the scientific and mathematical ideas of children from culturally diverse backgrounds. *Teachers College Record*, 105(2), 297-314.

The study explored a particular approach to teacher research, based in teachers' concerns for underachieving students, particularly those from non-mainstream backgrounds. They report on a conference where experienced teachers from existing teacher research groups met with new teachers to explore classroom data together. The conference was structured around joint exploration of children's classroom talk and work, with particular attention to the talk and work of "puzzling children," i.e., those a teacher finds difficult to understand. The experienced teacher researchers showed how close observation of children can challenge taken-for-granted assumptions about children's talk and work. They also demonstrated that children who make puzzling responses do not necessarily have deficient ideas, but rather are operating from a framework different from the one commonly assumed.

Buck, G., Mast, C., Ehlers, N., & Franklin, E. (2005). Preparing teachers to create a mainstream science classroom conducive to the needs of English-language learners: A feminist action research project, *Journal of Research in Science Teaching*, 42(9), 1013-1031.

A feminist action research team, which consisted of a science educator, an English-language learner (ELL) educator, a first-year science teacher, an a graduate assistant, set a goal to work together to explore the process a beginning teacher goes through to establish a classroom conducive to the needs of middle-level ELL learners. The guiding questions of the study were answered by gathering a wealth of data from the classroom, planning sessions, and researchers and students over the course of five months. These data were collected by observations, semi-structured interviews, and written document reviews. The progressive analysis ultimately revealed that: (a) successful strategies a beginning teacher must utilize for teaching middle-level ELL children in a mainstream classroom involve complex structural considerations that are not part of the teacher's preparation; (b) learning increases for all children, but there are differences

in learning achievement between ELL and non-ELL children; and (c) student and peer feedback proved to be an effective means of enhancing the growth of a beginning teacher seeking to increase her skills in teaching ELL learners.

Buxton, C., Lee, O., & Santau, A. (in press). Promoting science among English language learners: Professional development for today's culturally and linguistically diverse classrooms. *Journal of Science Teacher Education*.(volume, number, pp not available)

This article describes a model professional development intervention currently being implemented to support third through fifth grade teachers' science instruction in nine urban elementary schools with high numbers of ELL students. The intervention consists of curriculum materials for both students and teachers, as well as teacher workshops throughout the school year. The curriculum materials and workshops are designed to complement and reinforce each other in improving teachers' knowledge, beliefs, and practices in science instruction and English language development for ELL students. In addition to these primary goals, secondary goals of the intervention include supporting teachers' and students' mathematical understanding, improving teachers' and students' scientific reasoning, capitalizing on students' home language and culture, and preparing students for high-stakes science testing and accountability through hands-on, inquiry-based learning experiences.

Carr, J., Sexton, U., & Lagunoff, R. (2006). *Making science accessible to English learners: A guidebook for teachers*. San Francisco: WestEd.

This guidebook is designed for middle and high school science teachers who are looking for practical ways to help ELL students in their classrooms understand the rigorous science content reflected in state standards. Science teachers at the elementary school level should also find the strategies in this guidebook relevant and useful, although the content of specific examples do not always reflect elementary school standards. The guidebook is meant for use in conjunction with district textbooks and other materials and within a program of teacher support that includes professional development, collegial discussions, and coaching.

Fathman, A. K., & Crowther, D. T. (Eds.). (2006). *Science for English language learners: K-12 classroom strategies*. Arlington, VA: National Science Teachers Association.

This book is for teachers, prospective teachers, and teacher educators. Its purpose is to provide educators with a guide for teaching science to ELL students. By using this book, educators will develop experience in teaching science content and processes, in language and literacy development, and in inquiry-based teaching, while getting practical ideas for teaching. The book describes instructional practices in science and language, describes effective teaching strategies, provides models for lesson and curriculum development, and gives an overview of standards development and implementation.

Fradd, S. H., & Lee, O. (1995). Science for all: A promise or a pipe dream for bilingual students? *Bilingual Research Journal*, 19, 261-278.

The study examined teachers' perceptions of science instruction at two elementary schools, one suburban and one urban, with high percentages of ELL students. It was conducted through formal and informal interviews with teachers. The results indicated that teachers in both schools viewed science instruction positively, expressed beliefs that all students could learn science, and stressed that science learning opportunities should be available to all students. They also agreed on the importance of active student engagement, practical applications in daily life, and authentic and meaningful tasks. They emphasized the need to promote language development during science instruction for all students. Despite these similarities, the two schools displayed clear contrasts in terms of teachers' ideas about opportunities and resources for science learning and the instructional environment in each school setting. The urban school teachers perceived students' limited English proficiency and cultural difference as reasons for their difficulties in learning science. The teachers were not specific about instruction or articulate about their own beliefs regarding effective instructional approaches. In contrast, the suburban schoolteachers generally promoted science learning along with English language skills more effectively than those at the urban school (although it should be recognized that ELL students at the suburban school were likely to have better academic skills in the home language than those at the urban school). However, even under these more favorable conditions, the suburban teachers missed opportunities to promote student learning, as their science instruction tended to involve discrete science activities rather than being organized around a comprehensive science program.

Hampton, E., & Rodriguez, R. (2001). Inquiry science in bilingual classrooms. *Bilingual Research Journal*, 25(4), 461-478.

The study implemented a hands-on, inquiry science curriculum (i.e., the Full Option Science Series, FOSS) with Spanish-speaking elementary children who were developing English fluency along with their first language skills. This curriculum was used in a science teacher preparation program and the university interns, in turn, taught science using this curriculum to K-5 grade students in 62 classrooms at three elementary schools near the U.S.-Mexican border. They taught six one-hour lessons over the course of six weeks, with half of the instruction in Spanish and half in English. One written assessment, containing three inquiry items and three open-ended response items about the Foods and Nutrition unit, was administered to 107 5th grade students. The four-page written assessment was available to the students in Spanish or English, and they could respond in the language of their choice. Of the students 55% chose to respond in Spanish and 45% responded in English. Correct performance ranged from about 33% to 51% across the six items. There was relatively little difference between children who chose to respond in Spanish and those who chose to respond in English. Additionally, participants' perceptions were examined from multiple data sources, including university interns via written comments and focus group interviews, in-service teachers via an attitude survey and written comments, and 80 3rd grade students via an attitude survey. The consistency of the data indicates that there was a strong positive feeling among university interns, classroom teachers, and elementary students about the value of this inquiry approach for increasing the children's understanding of science concepts in both languages.

Lee, O. (2005). Science education and English language learners: Synthesis and research agenda. *Review of Educational Research*, 75(4), 491-530.

This review analyzes and synthesizes current research on science education with ELLs. Science learning outcomes with ELLs are defined in the context of equitable learning opportunities. Then, the literature on science education with ELLs is discussed with regard to science learning, science curriculum (including computer technology), science instruction, science assessment, and science teacher education. Science education initiatives, interventions, or programs that have been successful with ELLs are highlighted. Conclusions with regard to key features (e.g., theoretical perspectives and methodological orientations) and key findings in the literature are offered. Finally, a research agenda is proposed to strengthen those areas in which the need for a knowledge base is most urgent, as well as those which show promise in establishing a robust knowledge base.

Lee, O., & Fradd, S. H. (1998). Science for all, including students from non-English language backgrounds. *Educational Researcher*, 27(3), 12-21.

Standards-based reform across subject areas has an overarching goal of achieving high academic standards for all students. Although much is known about what constitutes high academic standards, little attention has been given to the attainment of educational equity for all students. This article proposes the notion of *instructional congruence* as a way of making academic content accessible, meaningful, and relevant for diverse learners. Although the discussion considers English language learners in science education, comparable approaches can be applied to other diverse student groups and other subject areas. An agenda for promoting research, practice, and policy in promoting high standards for all students across subject areas is discussed.

Stoddart, T., Pinal, A., Latzke, M., & Canaday, D. (2002). Integrating inquiry science and language development for English language learners. *Journal of Research in Science Teaching*, 39(8), 664-687.

As part of an NSF-supported local systemic initiative, the study involved 24 elementary schoolteachers of predominantly Latino ELL students. The thesis of this research is that inquiry-based science provides a particularly powerful instructional context for the integration of science content and second language development with ELL students. Based on a conceptual framework for integrating English language development with inquiry-based science, the researchers developed a five-level rubric to assess teachers' understanding of science and ESOL integration. Then, based on interviews with the 24 teachers, they provide exemplars of teacher thinking at each level in the rubric. The preliminary analyses of teachers' work during the five-week summer professional development program indicate changes in teachers' understanding of science and language integration. Prior to their participation, the majority of teachers viewed themselves as well prepared to teach either science or language, but not both. After their participation in the professional development program, the majority of teachers believed they had improved in the domain in which they had initially felt less prepared. This change typically involved a shift from a restricted view of the connections between inquiry science instruction and second language development to a more elaborated reasoning about the different ways that the two could be integrated.

Warren, B., & Rosebery, A. S. (1995). Equity in the future tense: Redefining relationships among teachers, students, and science in linguistic minority classroom. In W. G. Secada, E. Fennema, & L. B. Adajian (Eds.), *New directions for equity in mathematics education* (pp. 298-328). New York: Cambridge University Press.

As part of the ongoing Chèche Konnen Project, the study adopted a sociocultural view of teaching and learning in the description of how teachers practiced science as members of a scientific community. The researchers organized a seminar on scientific sense-making and worked with eight teachers, including five bilingual education teachers, two ESL teachers, and a science specialist. The teachers and the research team met every other week for two hours after school during the school year and for two weeks in the summer. They engaged in doing science as well as thinking about science as a discourse with particular sense-making practices, values, beliefs, concepts, objects, and ways of interacting, talking, reading, and writing. As they conducted scientific investigations around their own questions and shared their work with colleagues, the teachers learned to appropriate the discourse of science. They also felt that they succeeded in creating classroom communities in which students' scientific questions were valued, while they continued to reflect on ways to help shape students' questions into scientific investigations.

NOTE: The following list of studies by Lee and colleagues is presented in conceptual order and described in one combined annotation.

- Lee, O. (2004). Teacher change in beliefs and practices in science and literacy instruction with English language learners. *Journal of Research in Science Teaching*, 41(1), 65-93.
- Lee, O., Hart, J., Cuevas, P., & Enders, C. (2004). Professional development in inquiry-based science for elementary teachers of diverse students. *Journal of Research in Science Teaching*, 41(10), 1021-1043.
- Hart, J., & Lee, O. (2003). Teacher professional development to improve science and literacy achievement of English language learners. *Bilingual Research Journal* 27(3), 475-501.
- Lee, O., Luykx, A., Buxton, C. A., & Shaver, A. (2007). The challenge of altering elementary school teachers' beliefs and practices regarding linguistic and cultural diversity in science instruction. *Journal of Research in Science Teaching*, 44(9), 1269-1291.
- Lee, O., Deaktor, R., Enders, C., & Lambert, J. (in press). Impact of a multi-year professional development intervention on science achievement of culturally and linguistically diverse elementary students. *Journal of Research in Science Teaching*.
- Lee, O., Deaktor, R. A., Hart, J. E., Cuevas, P., & Enders, C. (2005). An instructional intervention's impact on the science and literacy achievement of culturally and linguistically diverse elementary students. *Journal of Research in Science Teaching*, 42(8), 857-887.
- Cuevas, P., Lee, O., Hart, J., & Deaktor, R. (2005). Improving science inquiry with elementary students of diverse backgrounds. *Journal of Research in Science Teaching*, 42(3), 337-357.
- Lee, O., Buxton, C. A., Lewis, S., & LeRoy, K. (2006). Science inquiry and student diversity: Enhanced abilities and continuing difficulties after an instructional intervention. *Journal of Research in Science Teaching*, 43(7), 607-636.
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- Lee, O., LeRoy, K., Thornton, C., Adamson, K., Maerten-Rivera, J., & Lewis, S. (in press). Teachers' perspectives on a professional development intervention to improve science instruction among English language learners. *Journal of Science Teacher Education*.
- Lee, O., Lewis, S., Adamson, K., Maerten-Rivera, J., & Secada, W. G. (in press). Urban elementary school teachers' knowledge and practices in teaching science to English language learners. *Science Education*.
- Lee, O., Maerten-Rivera, J., Penfield, R., LeRoy, K., & Secada, W. G. (in press). Science achievement of English language learners in urban elementary schools: Results of a first-year professional development intervention. *Journal of Research in Science Teaching*.

Lee (2004) examined patterns of change in elementary teachers' beliefs and practices as they learned to teach English language and literacy as part of science instruction through their three-year collaboration with the research team. Working with six bilingual Hispanic teachers of Hispanic students at two elementary schools, Lee described changes in teachers' beliefs and practices around literacy instruction. Teachers gradually learned to provide effective linguistic scaffolding, helped students acquire the conventions of standard oral and written English, and used multiple representational formats in oral and written communication. Overall, science instruction provided a meaningful context for English language and literacy development, while language processes provided the medium for understanding science.

As expansion of Lee (2004), Lee and colleagues implemented similar, but less intensive, professional development intervention with all 3rd, 4th, and 5th grade teachers (over 75) from six elementary schools serving students from diverse linguistic and cultural backgrounds. They examined the impact of the intervention on each of the three domains: (a) inquiry-based science, (b) English language and literacy, and (c) students' home language and culture. In the first domain involving science instruction, after one-year participation in the intervention, the teachers reported significantly enhanced knowledge of science content and stronger beliefs about the importance of science instruction with ELL students, although their actual practices did not show statistically significant change (Lee, Hart, Cuevas, & Enders, 2004). In the second domain involving the integration of English language and literacy development as part of science instruction, teachers came to place greater emphasis on the importance of reading and writing in science instruction, express a broader and more integrated conceptualization of literacy in science, and provide more effective linguistic scaffolding to enhance scientific understanding (Hart & Lee, 2003). In the third domain involving incorporation of students' home language and cultural experiences in science instruction, teachers rarely incorporated students' home language or culture into science instruction, as they began their participation in the intervention. During the two-year period of the intervention, teachers' beliefs and practices remained relatively stable and did not show significant change (Lee, Luykx, Buxton, & Shaver, 2007).

Beyond examining the impact of the professional development intervention on teachers' beliefs and practices, Lee and colleagues also examined its impact on student outcomes. For 3rd, 4th, and 5th grade students over the three-year period of the intervention, significance tests of mean scores between pre- and posttests indicated statistically significant increases each year on all measures of project-developed science tests at all three grade levels (Lee, Deaktor, Enders, & Lambert, in press). Achievement gaps among demographic subgroups sometimes narrowed

among 4th grade students and remained consistent among 3rd and 5th grade students. Item-by-item comparisons with NAEP and TIMSS samples indicated overall positive performance by students at the end of each school year. Similar patterns of increased achievement gains and narrowing of achievement gaps were found in literacy (writing) outcomes (Lee, Deaktor, Hart, Cuevas, & Enders, 2005). Specifically with regard to the ability to conduct science inquiry of a sample of 25 third and fourth grade students, paired samples t-tests results indicated that the intervention enhanced the students' inquiry ability, regardless of demographic backgrounds. Particularly, low achieving, low SES, and ESOL exited students made impressive gains (Cuevas, Lee, Hart, & Deaktor, 2005). More detailed analysis indicated that although these students demonstrated enhanced abilities with some aspects of the inquiry task, they continued to have difficulties with other aspects of the task even after instruction (Lee, Buxton, Lewis, & LeRoy, 2006). Confirming the results by Cuevas et al. (2005), while students from all demographic subgroups showed substantial gains, students from non-mainstream and less privileged backgrounds in science showed higher gains in inquiry abilities than their more privileged counterparts.

The results of the above series of studies by Lee and colleagues indicated teachers' overall receptiveness to the intervention as well as its relative strengths and weaknesses with regard to the professional development goals. The results also indicated the positive impact of the intervention on students' achievement outcomes and on narrowing of achievement gaps among demographic subgroups. ELL students demonstrated statistically significant gains in science and literacy (writing) achievement and enhanced abilities to conduct science inquiry. Especially, bilingual Spanish/English speaking students and those who exited from ESOL programs showed achievement outcomes that were comparable to or higher than those monolingual English speaking students, thus narrowing achievement gaps. Given that the research included all 3rd, 4th, and 5th grade teachers within the six participating schools, rather than a self-selected group of volunteer teachers with an interest in "teaching science for diversity," their beliefs and practices may be more representative of teachers in general. Thus, the results have implications for further large-scale implementation (i.e., scaling up) of the intervention with diverse student groups in urban school districts.

In their current research, Lee and colleagues implement a professional development intervention that is aimed at improving science and literacy achievement of ELL students in urban elementary schools within the policy context increasingly driven by high-stakes testing and accountability across content areas, including science. The research tests two research questions: (1) can ELL students learn academic subjects, such as science, while also developing English proficiency? and (2) can ELL students, who learn to think and reason scientifically, also perform well on high-stakes testing? The research involves teachers from grades 3 through 5 and their students at 15 elementary schools in a large urban school district. All the schools enroll high proportions of ELL students and students from low socioeconomic status (SES) backgrounds, and have traditionally performed poorly according to the state's accountability plan.

At the end of the first-year of the five-year intervention, teachers believed that the intervention, through the provision of curriculum materials and teacher workshops, effectively promoted students' science learning along with English language development and mathematics learning

(Lee, LeRoy, Thornton, Adamson, Maerten-Rivera, & Lewis, in press). Teachers highlighted many strengths as well as areas needing improvement in the intervention, and the teachers' perspectives are incorporated into our on-going intervention efforts. Based on the first-year results using a teacher questionnaire, classroom observations, and post-observation interviews, teachers' knowledge and practices in teaching science while supporting English language development of English language learning (ELL) students were generally within the bounds supported by the intervention; however, such knowledge and practices fell short of the goal of reform-oriented practices (Lee, Lewis, Adamson, Maerten-Rivera, & Secada, in press). Additionally, the research examined the impact of the intervention on science achievement of ELL students at the end of the first-year implementation (Lee, Maerten-Rivera, Penfield, LeRoy, & Secada, in press). The study involved 1,134 third grade students at 7 treatment schools and 966 third grade students at 8 comparison schools. The results led to three main findings. First, treatment students displayed a statistically significant increase in science achievement. Second, students who were currently enrolled in ESOL programs (ESOL levels 1 through 4) performed comparably to students who had existed from ESOL or never been in ESOL. Third, treatment students showed a higher score on a statewide mathematics test, particularly on the measurement strand emphasized in the intervention, than comparison students. The results indicated that through our professional development intervention, ELL students and others in the intervention learned to think and reason scientifically while also performing well on high-stakes testing.

Mathematics

Dale, T. C., & Cuevas, G. J. (1987). Integrating mathematics and language learning. In J. A. Crandall (Ed.), *ESL through content-area instruction: Mathematics, science, social studies* (pp. 9-54). Englewood Cliffs, NJ: Prentice Hall Regents.

Dale and Cuevas, drawing on extensive research and teaching experiences, recognize the challenge that mathematics can be for ELLs. They do not subscribe to the myth that mathematics is numbers and not language; therefore, ELLs will do fine in math classes. They clarify language issues specific to mathematics and describe how everyday vocabulary takes on math-specific meanings in the math classroom. They discuss the abstract nature of math and describe some common mistakes made by ELLs in math classes. They do an excellent job explaining the language skills needed for math learning.

This article will resonate with mathematics teachers at all levels. The authors provide extensive specific suggestions on how to encourage language development in the mathematics classrooms. This article should be in the hands of every math teacher.

Secada, W. (1992). Race, ethnicity, social class, language, and achievement in mathematics. In D. Grouws (Ed.), *Handbook of research on math teaching and learning* (pp. 623-660). New York: Macmillan.

NOTE: The description of this chapter appears under "Demographic Information."

Secada, W. G. (2000) (ed) *Changing the faces of mathematics: Perspectives on multiculturalism and gender equity*. Reston, VA: National Council of Teachers of Mathematics.

This volume of a six-volume series discusses issues and highlights successful equity practices. The book relates equity to issues of systemic reform, access to technology, definitions of culture and multiculturalism, tracking, assessment, parent involvement, teacher education and attitudes of math teachers. It also includes ideas of culturally-responsive curricular and instructional strategies, with special attention devoted to the integration of multicultural textbooks into early-grades math. Also presented are a feminist epistemology in math, and a cognitive analysis of language issues and their relationship to assessment.

Assessment

Abedi, J. (2007). *English language proficiency assessment in the nation: Current status and future practice*. Davis, CA: University of California, Davis: School of Education.

A compendium of policies and practices on assessment and accountability of ELLs. Includes an overview of English language proficiency (ELP) tests, and chapters on the principles and development of large-scale assessments and accountability systems.

Abedi, J., Courtner, M., Mirocha, J., Leon, S., & Goldberg, J. (2005). *Language accommodations for English language learners in large scale assessments: Bilingual dictionaries and linguistic modification*. Washington, DC: Institute of Education Sciences.

This study investigated the validity, effectiveness, differential impact, and feasibility of the use of accommodation in a group of 611 (including 317 ELL students) Grade 4 and Grade 8 students at 11 school sites. The authors found that some of the accommodation strategies employed were effective in increasing the performance of ELL students and reducing the performance gap between ELL and non-ELL students. Other findings suggest that the effectiveness of accommodation may vary across grade levels, where some forms of accommodation strategies were shown to be effective for Grade 4 students but not for Grade 8 students, and that the accommodation strategies used in this study did not impact the performance of the general student population. The authors also discuss implications of the study's findings for policy, practice, and future research.

Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). *Practical guidelines for the education of English language learners*. Portsmouth, NH: Center on Instruction.

Book three of this three-book report focuses on the inclusion of English language learners (ELLs) in large scale assessments and provides research-based recommendations on the use of accommodations to increase the valid participation of ELLs in such assessments. The authors provide an overview of the background information on the inclusion of ELLs in large scale assessments and the role of language in content area assessments, background information on accommodations, including the complementary concepts of effectiveness and validity as they

relate to proposed assessments, and review relevant research on state policies regarding accommodations for ELLs. The authors also describe the most common accommodations that have been studied in empirical research and conducts a quantitative synthesis of this research in order to determine accommodations currently known to be most effective. This section also offers recommendations for the use of accommodations to increase ELL participation in state assessments.

Gottlieb, M. (2006). *Assessing English language learners: Bridges from language proficiency to academic achievement*. Thousand Oaks, CA: Corwin Press.

This text addresses the issue of valid and reliable testing of English Language Learners (ELLs) in classrooms and on standardized tests. Standards based curriculum and high stakes testing are evident in schools across the US. Also apparent is an increase in students who are not native speakers of English. The author provides in-depth information on bridging the gap of language development and subject area mastery. This resource provides suggestions for appropriate assessment of language development and content area mastery of ELLs. The text provides examples on ways to create equitable assessments based on the level of language proficiency. Rubrics and charts are provided to assist in test construction. In addition, chapter questions provide an opportunity for discussion in regards to integrating teaching standards, standardized testing and grading policy in an equitable manner for ELLs.

O'Malley, J. M., & Pierce, L.V. (1996). *Authentic assessment for English language learners*. Reading, MA: Addison-Wesley.

In the age of standardized, high-stakes tests, O'Malley and Pierce provide useful alternatives for classroom assessment to monitor the on-going learning of ELL and to use that information to drive instruction. Although the book title focuses on assessment of ELLs, the classroom assessments (i.e., portfolios, self- and peer assessments, and scoring rubrics) are effective tools for use with all students. Assessments for skills areas (oral language, reading, and writing) and content area assessments provide a rich resource for mainstream and ESL teachers.

This highly readable teacher-friendly text contains concise explanations of authentic assessments, instructions on how to develop these assessments, and clear applications in a variety of settings. Numerous examples of authentic assessments with visuals and reproducible forms are included. At the end of each chapter, Application Activities are provided that would be useful for professional development activities to give teacher confidence in integrating authentic assessment into their teaching. This book is also an excellent direct teacher resource.

Shohamy, E. (2001). Democratic assessment as an alternative. *Language Testing*, Vol. 18, no. 4, 373-391.

The article describes the power of tests and suggests that they lead to far-reaching and high-stakes decisions and consequences about individuals and groups. The author provides evidence that tests are often introduced by those in authority as covert disciplinary tools, and proposes a number of assessment strategies which are based on democratic principles so that society can

guard and protect itself from such undemocratic practices. Such principles include the need for citizens in democratic societies to play a participatory and active role and transfer and share power from elites to and with local bodies; for those who develop powerful tools to be responsible for their consequences; to consider voices of diverse and different groups in multicultural societies; and to protect the rights of citizens from powerful institutions. The author also provides examples of assessment practices which are aimed at monitoring and limiting the uses of tests, especially those that have the potential to exclude and discriminate against groups and individuals.

Early Childhood

Au, K.H. (2000). Literacy instruction for young children of diverse backgrounds. In D.S. Strickland & L.M. Morrow (Eds.) *Beginning reading and writing* (pp.35-45). New York. Teachers College Press.

Kathryn Au's 4-page article targets best practices for teaching reading and writing at the primary grade level. Using a vignette of a kindergarten classroom teacher, the author gives concrete examples of the daily routine for developing literacy. Interspersed throughout the articles are the author's reflections and comments on the teaching and learning activities. Key components consist of explicit instruction, modeling and scaffolding via mini lessons. The importance of adhering to a set routine day in and day out as well as the need to build a sense of community in the classroom is emphasized. The author postulates that activities such as paired reading, planned writing and asking questions can create a supportive climate for learning. The reader travels through the daily routine of the class and gets a glimpse of how the teacher incorporates effective teaching strategies in a highly engaged classroom and the reasons for her choices to use specific strategies for targeted tasks.

Tabors, P.O. (1997). *One child, two languages: A guide for preschool educators of children learning English as a second language*. Baltimore, MD: Paul H. Brooks.

Written primarily for preschool educators this book offers specific techniques and strategies to create responsive classrooms for ELLs. Teaching ELLs requires additional information about second language development and culture in addition to child development to address the needs of children adjusting to new social and linguistic contexts.

Vaughn, S., Linan-Thompson, S., Pollard-Durodola, S., Mathes, P., Cardenes Hagan, E. (2006). Effective Interventions for English Language Learners at Risk for Reading Difficulties. In S. S. Neuman & D. K. Dickinson (EDS.), *Handbook of early literacy research. Vol. 2* (pp.183-194). New York: Guilford Press.

This article describes a study implemented to track the effectiveness of specific strategic interventions with ELLs and Spanish-English ELLs. The report concluded that improvement in reading, fluency and comprehension was evident when systematic and explicit interventions that focused on critical elements of reading were implemented. Components of successful interventions included English language development, phonemic awareness, vocabulary focus

and opportunity for active engagement. In addition, academic gains were made when students were able to make connections, respond to higher order questioning, build concept development, participate in paired or cooperative groups that called for academic language use and provided immediate feedback in reading and speaking. The study also took a look at the level of orthographic complexity (shallow to deep) from one language to another and its impact on linguistic transference and interference.

**Educating English Language Learners:
Building Teacher Capacity
Roundtable Report**

Volume III

**State Requirements for Pre-service Teachers
of ELLs**

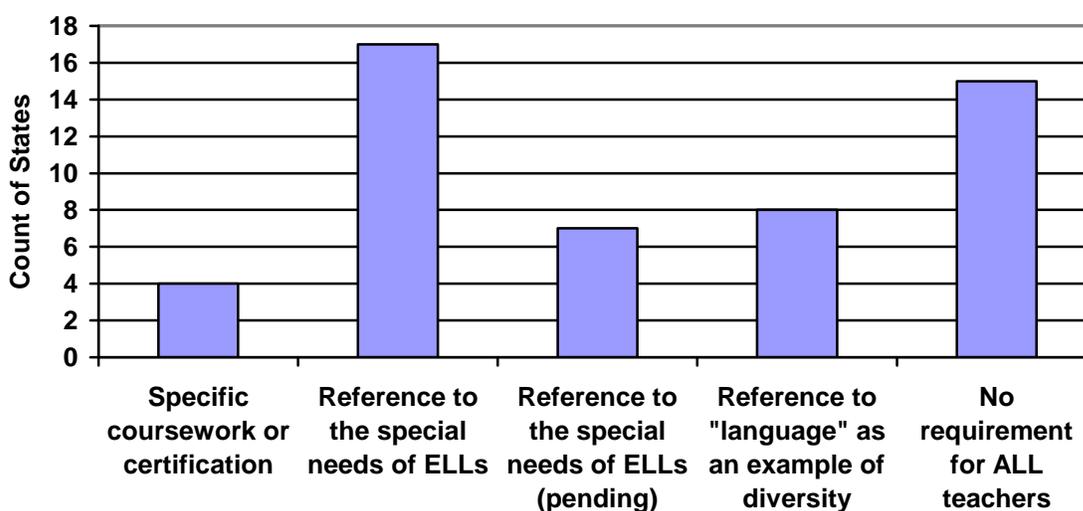
As the number of English language learners (ELLs) in the U.S. increases, states are faced with the heightened challenge of ensuring that all students receive a high quality education. It is therefore important that teacher education programs, whether offered by universities, states or local systems, include effective ELL instructional strategies for all teachers. The responsibility for educating ELLs does not lie solely with those teachers who have ESOL or bilingual education licenses, but with all teachers who have or may have ELLs in their classrooms. This report summarizes state policies and legislation that require newly qualified teachers to have experience with or education in the teaching of ELLs.

Summary of Findings

States can be divided into the following five categories with respect to the amount of training or expertise required of all new teachers:

- States with specific coursework or certification¹ requirements for all teachers (4 states).
- States where teacher certification standards for all teachers contain reference to the special needs of ELLs (17 states).
- States in transition, which use the standards published by the National Council for Accreditation of Teacher Education (NCATE). NCATE standards to be implemented in the Fall of 2008 contain reference to ELLs (7 states).
- States where teacher certification standards for all teachers contain reference to “language” as an example of diversity (8 states).
- States where there is no requirement that all teachers have expertise or training in working with ELLs (15 states).

States by Category of ELL Training Required of New Teachers



¹ The terms certification/licensure and certificate/license are used interchangeably in this report.

The information presented in this report most directly applies to new teachers seeking initial licensure or certification. In order to become licensed in a given state, a prospective teacher must typically graduate from a teacher preparation program approved by that state. This report primarily considers the standards or requirements of these programs. Alternate routes to certification were not expressly addressed, nor were requirements for teacher transfers and experienced teachers. The report thus describes a small slice of the total teacher population and should not be taken as representative of the capability of all teachers of ELLs.

The standards and requirements for approved teacher preparation programs can be found in various types of publications from state to state. Publications reviewed for this report include the Web sites of state departments of education and boards of education; state administrative rules or codes (that is, the legally binding rules which apply to state agencies such as departments of education), and standards published by state agencies or their subcommittees. Legal requirements of course change over time; the information presented herein is correct as of February 2008. This volume was released at that time on NCELA's Web site under the title *Teaching ELLs in mainstream classrooms: State-by-State requirements for all pre-service teachers*.²

States with Specific Coursework or Licensure/Certification Requirements

This category includes states that require teachers to complete a certain number of credits or semester hours in TESOL or instructional techniques appropriate for ELLs. While these are usually completed in a state-approved teacher education program, the requirements may be satisfied in other settings. This category includes Arizona, California, Florida, and New York. Pennsylvania will require teachers graduating by 2011 from approved teacher preparation programs in the state to have completed specific coursework in working with ELLs.

Arizona

Arizona's new requirements, implemented in 2005, require an endorsement in Structured English Immersion (SEI) for all certified teachers, principals and superintendents in the state. The provisional SEI endorsement requires three semester hours for preservice teachers, and either one semester hour or fifteen clock hours of professional development for inservice teachers in instructional strategies, teaching with the Arizona ELL Proficiency Standards, and monitoring academic progress using a variety of assessment tools. A provisional endorsement is valid for three years, after which time teachers must complete the full endorsement. The SEI endorsement requires, in addition to the provisional requirements, an additional three semester hours for preservice teachers, or, for inservice teachers, 45 clock hours of professional development (Certification, 2005, 613-J.).

² Available from http://www.ncela.gwu.edu/policy/legislation/preservice_reqs.pdf. Although this version differs slightly in format, no new substantive information is included.

California

As in many states, there are various pathways to licensure in California. The majority require content in the teaching of ELLs, and all teachers who train in state approved educator programs must complete university coursework relating to the teaching of ELLs (California Commission on Teacher Credentialing, 2006, 2007c).

For example, all new elementary and secondary teachers who train at state approved educator programs must complete the “Developing English Language Skills” requirement which includes:

a comprehensive reading instruction course that includes the following: the systematic study of phonemic awareness, phonics, and decoding; literature, language and comprehension; and diagnostic and early intervention techniques
(California Commission on Teacher Credentialing, 2007a)

Out-of-state teachers wishing to be certified in California are required to complete the Cross-Cultural Language and Academic Development (CLAD) credential or an equivalent (California Commission on Teacher Credentialing, 2007b). Beginning elementary school teachers must also pass a standardized test in the teaching of reading (California Council on Teacher Credentialing 2006).

Florida

All Florida teachers are required to complete at least three semester hours or equivalent of training in TESOL. These provisions apply to both new and experienced teachers; they may meet the requirements via university coursework or in-service training. For teachers from whom students receive primary literacy instruction (usually at the elementary level) the requirement is for 15 semester hours or the equivalent (Florida Department of Education, 2001, pp. 6-8).

New York

All teachers graduating from approved teacher preparation programs in New York are required to complete six semester hours in language acquisition and literacy development. The coursework applies to both native English speakers and ELLs (Registration of curricula in teacher education, 2006, (b)(2)(ii)(c)).

Pennsylvania (Pending)

Current Pennsylvania regulations do not require that all teachers have training or expertise in working with ELLs (Pennsylvania Department of Education, 2006). By January 2011, however, teachers graduating from approved Pennsylvania programs must complete 3 credits or 90 hours of coursework or other preparatory work addressing the instructional needs of ELLs (Certification of Professional Personnel, 2007, (b)(4)(i)).

States with Reference to Special Needs of ELLs

There are seventeen states in which the standards for approved teacher preparation programs mandate that teachers should be experienced with, familiar with, or competent in addressing the special needs of ELL students. States in this category are:

Alabama	Maryland	North Dakota
Colorado	Massachusetts	Rhode Island
Idaho	Michigan	Tennessee
Illinois	Minnesota	Vermont
Iowa	Nevada	Virginia
Louisiana	New Jersey	

An additional six states (see “NCATE states”, below) are likely to fall into this category by Fall 2008.

State guidelines in this category vary considerably. For example, Maryland has a specific 6-12 semester hour literacy requirement (Maryland State Department of Education, 1999, 2004), whereas Idaho’s states that “the teacher knows strategies to support the learning of students whose first language is not English” (Idaho State Board of Education & Idaho State Department of Education, 2005).

Maryland and Michigan both require that teachers graduating from state-approved programs complete coursework that includes content in reading instruction for ELLs. Tennessee stipulates in the introduction to its standards that the requirements apply to all populations within schools, including English language learners (Tennessee Department of Education, 2003).

The remaining states can be divided into two categories: those that require teachers from state-approved programs to have knowledge of second language acquisition or literacy research; and those that require new teachers be knowledgeable about ELL education or demonstrate effective ELL instructional strategies.

Maryland & Michigan

Both Maryland and Michigan have “reading instruction” requirements for new teachers which include detailed reference to ELLs within their standards.

Teachers graduating from an approved educator preparation program in Maryland must complete a requisite number of semester hours in reading instruction – six semester hours for secondary content area teachers, and twelve hours for early childhood or elementary level certification (Maryland State Department of Education, 1999, 2004). The reading instruction must include attention to reading for English language learners, and the relevant standards detail knowledge of: language influence on literacy; the impact of language on student learning in content area classrooms; the nature of reading and writing difficulties associated with limited language proficiency; the selection of varied reading materials; and strategies which assist readers with challenging texts.

Michigan requires six semester hours in reading instruction for elementary teachers, and three semester hours for secondary teachers. Standards for secondary content teachers require knowledge of literacy instruction theory and practice as they pertain to ELLs (Michigan State Board of Education, 2002a, 2002b).

Knowledge of SLA and strategies to support ELLs

Standards in Alabama, Illinois, Minnesota, Nevada³ and New Jersey are essentially identical in their requirements for all teachers with respect to ELLs. Each of the five states requires training in second language acquisition and in “strategies to support the learning of students whose first language is not English” (Alabama Quality Teaching Standards, 2007; Standards for all Illinois teachers, 2002; Standards of Effective Practice for Teachers (MN), 2007; INTASC, 1992; Professional Licensure and Standards (NJ), 2006).

Strategies or accommodations for ELLs

The following nine states stipulate that teachers who graduate from state-approved education programs must have knowledge of strategies or accommodations appropriate for English language learners:

Colorado	North Dakota
Idaho	Rhode Island
Iowa	Vermont
Louisiana	Virginia
Massachusetts	

Below is a typical example of a standard from this category, taken from the *Performance-Based Standards for Colorado Teachers*:

The teacher has demonstrated the ability to:
6.2 Design and/or modify standards-based instruction in response to diagnosed student needs, including the needs of exceptional learners and English language learners.
(Colorado Department of Education, 2000)

³ Note that Nevada adopts by reference the standards of the Interstate New Teacher Assessment and Support Consortium (INTASC, 1992).

The NCATE States: Pending

The licensure requirements for the following seven states will likely be revised according to the upcoming changes in the standards of the National Council for Accreditation of Teacher Education (NCATE):

Alaska	Georgia	Mississippi
Connecticut	Kansas	South Carolina
Delaware		

These states do not directly approve teacher preparation programs but rely on NCATE or the National Association of State Directors of Teacher Education and Certification (NASDTEC) for their teacher education standards. The most current NCATE standards (NCATE, 2006) do not require that all teachers have training or expertise in working with ELLs. The standards to be implemented in the Fall of 2008 include the following statement (NCATE, 2007):

Curriculum and field experiences provide a well-grounded framework for understanding diversity, including English language learners ... They challenge students toward cognitive complexity and engage all students, including English language learners and students with exceptionalities, through instructional conversation. (NCATE, 2007, Standard 4a)

Alaska and South Carolina require that teachers seeking initial certification graduate from NCATE-approved institutions (Alaska Department of Education and Early Development, n.d.; Teacher Training Institutions (SC), 2006)). Connecticut requires that teacher preparation programs are either approved by NCATE or a state using NCATE standards (Connecticut State Department of Education, 2007). Delaware and Mississippi require that teachers graduate from programs approved by NCATE or NASDTEC⁴ (Delaware Department of Education, n.d.; Certification of Teachers and Administrators (MS), 1972). The newly ratified standards will thus move these states automatically into the category of states with reference to ELLs in their standards.

Kansas and Georgia have adopted NCATE standards “by reference”, essentially writing the NCATE standards directly into their statutes or official teacher standards material (Georgia Standards Commission, 2000; Kansas State Department of Education, 2005, p.33). It is not clear how such adoption by reference will be affected by the change at NCATE.

⁴ NASDTEC standards are only available to members and could not be reviewed for this study.

States with Reference to Language As An Example of Diversity

While the standards for the following eight states do not explicitly refer to ELLs nor ELL pedagogy, they do require that teachers have an appreciation of diversity in the classroom and demonstrate effective strategies to teach diverse groups of learners. This category includes states in which language is mentioned as an example among other areas of diversity including, for example, race, religion, or socioeconomic background.

Arkansas	Ohio
Montana	Oregon
New Mexico	West Virginia
North Carolina	Wyoming

A typical example is provided by North Carolina (from the North Carolina *Standards and Indicators for Teacher Education Programs*):

2-1 Diversity Standards

Introduction

Effective beginning teachers are successful in teaching a diverse population of students. They affirm that diversity truly exists and believe that education is fundamentally a cultural process that ultimately contributes to the academic success or failure of students. Diversity includes exceptionalities, race, ethnicity, religious backgrounds, gender, language (linguistic differences) socio-economic levels, and any of the other ways in which our society defines human differences (age, geography, sexual orientation, and national origins).

...

Standard 2: Teachers understand how students' cognitive, physical, socio-cultural, linguistic, emotional, and moral development influences learning and address these factors when making instructional decisions. (North Carolina State Board of Education, 2006).

Although there is far less variation in this category than in the previous, two states are worthy of further mention: West Virginia and Wyoming.

The West Virginia *Educator Preparation Program Standards* state that teachers must “know and demonstrate the content, pedagogical and professional knowledge, skills and dispositions necessary to help all students learn.” Linguistic diversity in this case is relegated to a footnote which reads:

“All students” include students with exceptionalities and the different ethnic, racial, gender, language, religious, socioeconomic and regional/geographical origins.”
(Approval of Educational Personnel Preparation Programs, 2007, Appendix A-5 I Standard 1).

In contrast, the standards required by the Professional Teaching Standards Board of Wyoming make a clear connection between language and learning and require a more specific set of competencies, though they do not explicitly reference ELLs.

Language and Communication. The teacher candidate is knowledgeable about the connections between a student's use of language and his/her success in learning; is competent in developing all students' language

skills and communication techniques across the curriculum; and models effective language skills and communication techniques. (Professional Teaching Standards Board, 2005, 5(a)(vi)).

States with No Requirement for All Teachers

In establishing that a state has no requirement that all teachers have training or expertise in working with ELLs, care was taken to thoroughly assess all possible avenues in which standards might be presented (for example within Administrative Codes, or rules of Standards Boards internal to Boards of Education, etc.). The documents that were assessed are listed in the References section under the relevant state.

The following fifteen states were found to have no requirement that all teachers have training in or expertise with working with ELLs.

District of Columbia	Missouri	South Dakota
Hawai'i	Nebraska	Texas
Indiana	New Hampshire	Utah
Kentucky	Oklahoma	Washington
Maine	Pennsylvania	Wisconsin

References

General References

- Interstate New Teacher Assessment And Support Consortium (INTASC). (1992). *Model Standards for Beginning Teacher Licensing, Assessment and Development: A Resource for State Dialogue*. Retrieved November 26, 2007 from <http://www.ccsso.org/content/pdfs/corestrd.pdf>
- National Council for Accreditation of Teacher Education (NCATE). (2006). *Professional Standards for the Accreditation of Schools, Colleges, and Departments of Education*. Retrieved November 26, 2007 from http://www.ncate.org/documents/standards/unit_stnds_2006.pdf
- National Council for Accreditation of Teacher Education (NCATE). (2007). *The NCATE Unit Standards*. Retrieved November 26, 2007 from <http://www.ncate.org/documents/standards/UnitStandardsMay07.pdf>
- Teacher Education Accreditation Council (TEAC). (n.d.). *Summary outline of the TEAC accreditation framework*. See also linked documents. Retrieved November 26, 2007 from <http://www.teac.org/accreditation/summaryoutline.asp>

References Alphabetized by State

Alabama

Alabama Quality Teaching Standards, 290 ALA. CODE § 3-3-.03 (2007). Retrieved November 20, 2007 from

<http://www.alabamaadministrativecode.state.al.us/docs/ed/MsofWord3ED3.pdf>

See specifically § (4)(c)2.

Alaska

Alaska Department of Education and Early Development. (n.d.). *Teacher Certification: Definitions*. Retrieved November 26, 2007, from

<http://www.eed.state.ak.us/TeacherCertification/Definitions.html>

Arizona

Certification, ARIZ. ADMIN. CODE 7-2-613 (2005) Retrieved January 31, 2008 from

http://www.azsos.gov/public_services/Title_07/7-02.htm#Article_6

Arkansas

Arkansas Department of Education (n.d.). *Arkansas Licensure Standards*. See also linked documents. Retrieved November 26, 2007 from

http://arkedu.state.ar.us/teachers/competency_areas.html

See specifically Standard Four of each of the *Arkansas Licensure Standards*.

California

California Commission on Teacher Credentialing (2006). *Teaching Elementary School*. See also linked documents. Retrieved November 27, 2007 from

<http://www.ctc.ca.gov/credentials/teach-elementary.html>

California Commission on Teacher Credentialing (2007a). *Single Subject Teaching Credential: Requirements for Teachers Prepared in California*. Retrieved November 27, 2007 from

<http://www.ctc.ca.gov/credentials/leaflets/cl560c.pdf>

California Commission on Teacher Credentialing (2007b). *Single Subject Teaching Credential: Requirements for Individuals Prepared Out-of-State*. Retrieved November 27, 2007 from

<http://www.ctc.ca.gov/credentials/leaflets/cl560.pdf>

California Commission on Teacher Credentialing (2007c). *Teaching High School*. See also linked documents. Retrieved November 27, 2007 from

<http://www.ctc.ca.gov/credentials/teach-secondary.html>

Colorado

Colorado Department of Education. (2000). *Performance-Based Standards for Colorado Teachers*. Retrieved November 20, 2007 from

http://www.cde.state.co.us/cdeprof/download/pdf/li_perfbasedstandards.pdf

See specifically Standard 6.2.

Connecticut

Connecticut State Department of Education. (2007). *Educator Preparation Program Approval*. Retrieved November 27, 2007 from <http://www.sde.ct.gov/sde/cwp/view.asp?a=2613&q=321812>

District of Columbia

License Requirements, D.C. MUN. REGS. tit. 5 § 16 (2002). Retrieved November 26, 2007 from [http://www.amlegal.com/nxt/gateway.dll/?f=templates\\$fn=main-nf.htm](http://www.amlegal.com/nxt/gateway.dll/?f=templates$fn=main-nf.htm)

Delaware

Delaware Department of Education. (n.d.). *Choosing an Approved Educator Program*. Retrieved November 26, 2007 from https://deeds.doe.k12.de.us/certificate/deeds_caep.aspx

Florida

Florida Department of Education, Bureau of Educator Recruitment and Professional Development. (2001). *Preparing Florida Teachers To Work With Limited English Proficient Students*. Retrieved November 20, 2007 from http://www.fldoe.org/profdev/pdf/final_esol.pdf

Georgia

Georgia Professional Standards Commission. (2000). *Georgia 2000 Standards for the Approval of Professional Education Units and Programs*. Retrieved November 26, 2007 from <http://www.gapsc.com/TeacherEducation/Procedures/ApprovalProcedures.asp>

Hawai'i

Hawai'i Teacher Standards Board. (2002). *Administrative Rules for Teacher Licensing*. Retrieved November 26, 2007 from http://www.htsb.org/licensing/relicense/HTSB_Relic_Rules.pdf

Idaho

Idaho State Board of Education & Idaho State Department of Education. (2005). *Idaho Standards for Initial Certification of Professional School Personnel*. Retrieved November 20, 2007 from <http://www.sde.idaho.gov/TeacherCertification/docs/NBPTS/StandardsBookFinal2005.pdf>
See specifically Core Standards 3(3) & 4(2).

Illinois

Standards for all Illinois Teachers, ILL. ADMIN. CODE tit. 23, § 24 (2002). Retrieved November 20, 2007 from <http://www.isbe.net/rules/archive/pdfs/24ark.pdf>
See specifically § 24.100 (c)(1)(B), § 24.110 (a)(1)(C) & § 24.110 (c)(2)(B)

Indiana

Professional Standards Board. (n.d.). *Indiana Professional Teacher Standards*. See also linked documents. Retrieved November 26, 2007 from <http://www.doe.state.in.us/dps/standards/teacherindex.html>

Iowa

Practitioner preparation candidate performance standards, IOWA ADMIN. CODE r.281-79.14 (2001). Retrieved November 20, 2007 from <http://www.iowa.gov/educate/content/view/477/535/>
See specifically r.79.14(1)c.

Kansas

Kansas State Department of Education. (2005). *Teacher Education and Licensure Regulations and Standards for Kansas Educators*. Retrieved November 26, 2007 from <http://www.ksde.org/Default.aspx?tabid=311>

Kentucky

Kentucky Educational Professional Standards Board. (1999a). *Experienced Teacher Standards for Preparation and Certification*. Retrieved November 26, 2007 from <http://www.kyepsb.net/teacherprep/expstandards.asp>
Kentucky Educational Professional Standards Board. (1999b). *New Teacher Standards for Preparation and Certification*. Retrieved November 26, 2007 from <http://www.kyepsb.net/teacherprep/newteachstandards.asp>

Louisiana

Louisiana's Reading and Language Competencies for New Teachers, LA. ADMIN. CODE tit. 28, § XCV.113 (2005). Retrieved November 20, 2007 from <http://doa.louisiana.gov/osr/lac/28v95/28v95.pdf>
See specifically § 207, § 701 & § 703.

Maine

Purpose, Standards and Procedures for the Review and Approval of Educational Personnel Preparation Programs, CODE ME. R. § 05-071 Ch. 114 (2006). Retrieved November 26, 2007 from <http://www.maine.gov/sos/cec/rules/05/chaps05.htm>
Requirements for Specific Certificates and Endorsements, CODE ME. R § 05-071 Ch. 115 (2007). Retrieved November 26, 2007 from <http://www.maine.gov/sos/cec/rules/05/chaps05.htm>

Massachusetts

Professional Standards for Teachers, MASS. REGS. CODE tit. 603, § 7 (2007). Retrieved November 26, 2007 from <http://www.doe.mass.edu/lawsregs/603cmr7.html?section=08>
See specifically § 7.08 2(b)(2)(g) and 2(d)3.

Maryland

Maryland State Department of Education (1999). *Secondary Content Areas, Special Education, N-12 Teaching Reading in the Content Areas: Part I and Part II*. Retrieved November 26, 2007 from <http://www.marylandpublicschools.org/NR/rdonlyres/C90FEC83-190A-4EFD-92E1-7344E7527C2B/12636/SecondaryContentAreasInformation.pdf>
See specifically pp. 7-9.

Maryland State Department of Education, Division of Certification and Accreditation, Office of Reading First (2004). *Reading Course Revision Guidelines For Elementary, Early Childhood and Special Education*. Retrieved November 26, 2007 from

<http://www.marylandpublicschools.org/NR/rdonlyres/C90FEC83-190A-4EFD-92E1-7344E7527C2B/7875/ReadingCourseRevisionGuidelines1.pdf>

See specifically pp. 5, 17, 25.

Michigan

Michigan State Board of Education. (2002a). *Certification Standards for the Preparation of All Secondary Teachers: Reading Instruction*. Retrieved November 26, 2007 from http://www.michigan.gov/mde/0,1607,7-140-6530_5683_6368---,00.html

See specifically pp. 4, 6.

Michigan State Board of Education. (2002b). *Certification Standards for the Preparation of All Elementary Teachers: Reading Instruction*. Retrieved November 26, 2007 from http://www.michigan.gov/mde/0,1607,7-140-6530_5683_6368---,00.html

See specifically pp. 4, 6.

Minnesota

Standards of Effective Practice for Teachers, MINN R. 8700.2000 (2007). Retrieved November 26, 2007 from <http://www.revisor.leg.state.mn.us/arule/8710/2000.html>

See specifically Subpart 4 C.

Mississippi

Certification of Teachers and Administrators, MISS CODE ANN. § 37-3-2 (1972). Retrieved November 26, 2007 from <http://michie.com/mississippi/lpext.dll?f=templates&fn=main-h.htm&cp>

See specifically § 37-3-2 6(a)(ii)

Missouri

The Missouri Department of Elementary and Secondary Education, Division of Urban and Teacher Education, Teacher Education and Assessment Section. (September 2003). *Missouri Standards for Teacher Education Programs (MoSTEP) Examiner's Handbook*. Retrieved November 26, 2007 from http://www.dese.missouri.gov/divteachqual/teached/MoStep_Examiners_Manual_2003.pdf

Missouri Department of Elementary and Secondary Education. (2007). *Compendium of Missouri Certification Requirements Index*. See also linked documents. Retrieved November 26, 2007 from <http://www.dese.mo.gov/schoollaw/rulesregs/EducCertManual/index.htm>

Montana

Montana Board of Public Education. (2000). *Professional Educator Preparation Program Standards and Procedures*. Retrieved November 26, 2007 from <http://www.opi.mt.gov/PDF/Accred/PEPPSStandards.pdf>

See specifically Appendix C xxv.

Nebraska

Approval of Teacher Education Programs, 92 NEV. ADMIN. CODE ch. 20 (2002). Retrieved November 26, 2007 from <http://www.nde.state.ne.us/LEGAL/clean20A.pdf>

Nevada

Educational Personnel, NEV. ADMIN. CODE ch. 391 § 556 (2003). Retrieved November 20, 2007 from <http://leg.state.nv.us/NAC/NAC-391.html#NAC391Sec556>

Interstate New Teacher Assessment And Support Consortium (INTASC). (1992). *Model Standards for Beginning Teacher Licensing, Assessment and Development: A Resource for State Dialogue*. Retrieved November 20, 2007 from <http://www.ccsso.org/content/pdfs/corestrd.pdf>

See specifically p. 18.

New Hampshire

Approval of Professional Preparation Programs, N.H. CODE ADMIN. R. Ed 600 (2004). Retrieved November 20, 2007 from <http://www.gencourt.state.nh.us/rules/ed600.html>

New Jersey

Professional Licensure and Standards, N.J. ADMIN. CODE tit. 6A, § 9 (2006). Retrieved November 20, 2007 from <http://www.nj.gov/education/code/current/title6a/chap9.pdf>

See specifically § 9-3.3(3).

New Mexico

School Personnel – Specific Licensure Requirements for Instructors, N. M. ADMIN. CODE tit. 6 § 61 (1995). Retrieved November 26, 2007 from

<http://www.nmcpr.state.nm.us/nmac/parts/title06/06.061.0002.htm>

See specifically § 61.2.10 F; § 61.3.10; § 61.4.10.

New York

Registration of curricula in teacher education, 8 NYCRR § 52.21 (2006). Retrieved November 20, 2007 from <http://www.highered.nysed.gov/tcert/part52-21.htm>

North Carolina

North Carolina State Board of Education. (2006). *Standards and Indicators for Teacher Education Programs* (NCSBE Policy Manual QP Series Category B). Retrieved October 15, 2007 from <http://sbepolicy.dpi.state.nc.us/policies/QP-B-002.asp?pri=02&cat=B&pol=002&acr=QP>

North Dakota

North Dakota Education Standards and Practices Board. (2007). *Multicultural Education and Native American Studies Standard*. Retrieved November 26, 2007 from

<http://www.nd.gov/espb/progapproval/docs/multiculture.pdf>

Ohio

State Board of Education & Ohio Department of Education. (2005). *Standards for Ohio Educators*. Retrieved November 26, 2007 from

<http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&TopicRelationID=559&ContentID=8561&Content=37548>

See specifically Standard 1.4, p. 17.

Oklahoma

Garrett, S. (2002). *Full, Subject-matter Competencies for Licensure and Certification*. Retrieved November 26, 2007 from <http://sde.state.ok.us/pro/tcert/pdfs/Competencies.pdf>

Oregon

Standards for Program Approval, OR. ADMIN. R. 584-017 (2007). Retrieved November 26, 2007 from http://arcweb.sos.state.or.us/rules/OARS_500/OAR_584/584_017.html
See specifically R. 584-017-0100(1)(f).

Pennsylvania

Pennsylvania Department of Education. (2006). *General Standards and Specific Program Guidelines for State Approval of Professional Educator Programs*. Retrieved November 20, 2007 from <http://www.teaching.state.pa.us/teaching/cwp/view.asp?a=135&Q=93761&PM=1>
Certification of Professional Personnel, 22 PA. CODE § 49.13 (2007). Retrieved November 20, 2007 from http://www.pacode.com/secure/data/022/chapter49/022_0049.pdf

Rhode Island

Rhode Island Department of Education. (2006). *Teacher Preparation Program Approval Guidelines*. Retrieved November 26, 2007 from http://www.ridoe.net/EducatorQuality/Teacher_Prep/2006%20Program%20Approval%20Guidelines.pdf
See specifically p. 71, Appendix C, Standard 4.1.

South Carolina

Teacher Training Institutions, 43 S.C. CODE REGS. 90 (2006). Retrieved November 26, 2007 from <http://www.scstatehouse.net/coderegs/c043.htm>

South Dakota

Teacher Preparation Program Approval, S.D. ADMIN. R. 24.16 (2006). Retrieved November 27, 2007 from <http://legis.state.sd.us/rules/DisplayRule.aspx?Rule=24:16>

Tennessee

Tennessee Department of Education. (2003). *Tennessee Licensure Standards and Induction Guidelines: Professional Education*. Retrieved November 26, 2007 from <http://www.state.tn.us/education/lic/doc/accttchlicstds.pdf>
See specifically pp. 3-1, 3-2.

Texas

State Board for Educator Certification. (2006). *Approved New Educator Standards*. Retrieved November 26, 2007 from <http://www.sbec.state.tx.us/SBECOnline/standtest/edstancertfieldlevl.asp?width=1024&height=768>

Utah

Licensing Routes, UTAH ADMIN. CODE 227-503-4 (2007). Retrieved November 26, 2007 from <http://www.rules.utah.gov/publicat/code/r277/r277-503.htm#T3>

Utah allows a number of professional organizations to act in lieu of the state in approving professional educator preparation programs; for an example of one such organization which does not require that all teachers have preparation in working with ELLs, see TEAC (n.d.).

Vermont

Vermont Standards Board for Professional Educators. (Aug 2003). *Five Standards for Vermont Educators: A Vision for Schooling*. Retrieved November 26, 2007 from

http://education.vermont.gov/new/pdfdoc/pgm_prostandards/vsbpe/five_standards_03.pdf

See specifically p. 9.

Virginia

Licensure Regulations for School Personnel, 8 VIRGINIA ADMIN. CODE § 22 (2007). Retrieved November 26, 2007 from

<http://www.pen.k12.va.us/VDOE/Compliance/TeacherED/nulicvr.pdf>

See specifically 8 VAC § 20-22-130(2)(a), 8 VAC § 20-22-130(2)(b) and 8 VAC § 20-22-190(2).

West Virginia

Approval of Educational Personnel Preparation Programs, W. VA. CODE ST. R. tit. 126, § 114 (2007). Retrieved November 26, 2007 from <http://www.wvsos.com/csrdocs/pdfdocs/126-114.pdf>

See specifically Appendix A-5, *West Virginia Educator Preparation Program Standards*.

Washington

Washington Office of Superintendent of Public Instruction. (2007). *Endorsement Competencies*. Retrieved November 26, 2007 from

<http://www.k12.wa.us/certification/profed/competency.aspx>

Wisconsin

Teacher Education Program Approval and Licenses, WISC ADMIN. CODE PI 34 (2004). Retrieved November 26, 2007 from <http://www.legis.state.wi.us/rsb/code/pi/pi034.pdf>

Wyoming

Professional Teaching Standards Board. (2005). *Certificate Requirements*. Retrieved November 26, 2007 from <http://soswy.state.wy.us/RULES/6081.pdf>

See specifically Section 5, (a)(vi)

Appendix: Roundtable Panelists

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