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Professional Development Principles for Teachers of English Language Learners

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Since effective professional development is logically embedded in the reality of schools and teachers' work, it stands to reason that the principal would consider that reality for teachers of English language learners (ELL). Certainly, in general, professional development would incorporate principles of adult learning as reported by Knowles (1980): (1) adult learners need to be self-directed; (2) they display readiness to learn when they have a perceived need; and (3) they desire immediate application of new skills and knowledge. Based on adult learning theory, then, principals would provide teachers of ELLs professional development that addresses a need for self-direction, that addresses their particular needs, and that addresses the desire to apply what is learned. Time and created situations whereby teachers can dialogue with other teachers and principals can dialogue with other principals is critical for the effective application of the knowledge gained in professional development sessions and afterward as well.

Researchers of professional development have documented such things as teacher satisfaction, attitude change, or commitment to innovation rather than results of or successful processes of professional development (Desimone, 2009; Frechtling, Sharp, Carey, & Vaden-Kiernan, 1995; Guskey & Bailey, 2000). To be effective, professional development must be internally coherent, rigorous, related to the campus and district vision and mission and the teacher's instructional goals, and it must be sustained over time (Little, 1993; Renyi, 1996; Sparks & Hirsch, 1997), and this is also the case specifically for teachers of ELLs in a recently-funded Institute of Education Sciences (IES) (R305P030032), a prior IES-funded longitudinal randomized trial study, Project English Language and Literacy Acquisition (ELLA) which yielded positive and strong evidence from a 4-year grade K-3 intervention in English language and literacy acquisition (ELLA) for ELLs in an urban school district that houses 66.9% Hispanic students, over 85% economically disadvantaged students, 32.2% ELLs, and 68.1% at-risk students. Through the 4-year study, we determined that high-quality professional development for teachers of ELLs refers to rigorous

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and relevant content, strategies, and organizational supports that ensure the preparation and career-long development of teachers and principals whose competence, expectations and actions influence the teaching and learning of ELLs. The mission of the ELLA professional development was to prepare and support teachers and principals to help ELLs achieve high standards of learning and development. We operated on 5 principles of effective professional development for teachers of ELLs and those principles are depicted in Figure 1 and discussed afterward.

Figure 1. Five principles of effective professional development for teachers of ELLs

Five Principles of Effective Professional Development for Teachers of ELLs

Effective professional development for teachers of ELLs:

1. reflects best available research and practice related to teaching ELLs
2. facilitates teachers' development in subject-matter content, ESL/Bilingual teaching strategies, use of integrated technologies, and other essential elements in teaching standards-aligned curriculum;
3. encourages teachers' improvement in practice through inquiry
4. involves substantial on-going time commitment on the part of the teachers and the developers;
5. is assessed related to the impact on teacher effectiveness and ELLs' learning, and this assessment guides subsequent professional development efforts.

These five principles are reflected in a consensus about some of the characteristics of professional development (content focus, active learning, coherence, duration, collective participation) that have been determined to be critical for increasing teacher knowledge and skills and improving practice, and which relate to increased student achievement (Hawley & Valli, 1999; Kennedy, 1998; Wilson & Berne, 1999). Similar to the ELLA principles for professional development for teachers of ELLs, Desimone (2009) proposed the following steps for professional development:

1. Teachers experience effective professional development.
2. The professional development increases teachers' knowledge and skills and/or changes their attitudes and beliefs.
3. Teachers use their new knowledge and skills, attitudes, and beliefs to improve the content of their instruction or their approach to pedagogy, or both.
4. The instructional changes foster increased student learning. (p. 184)

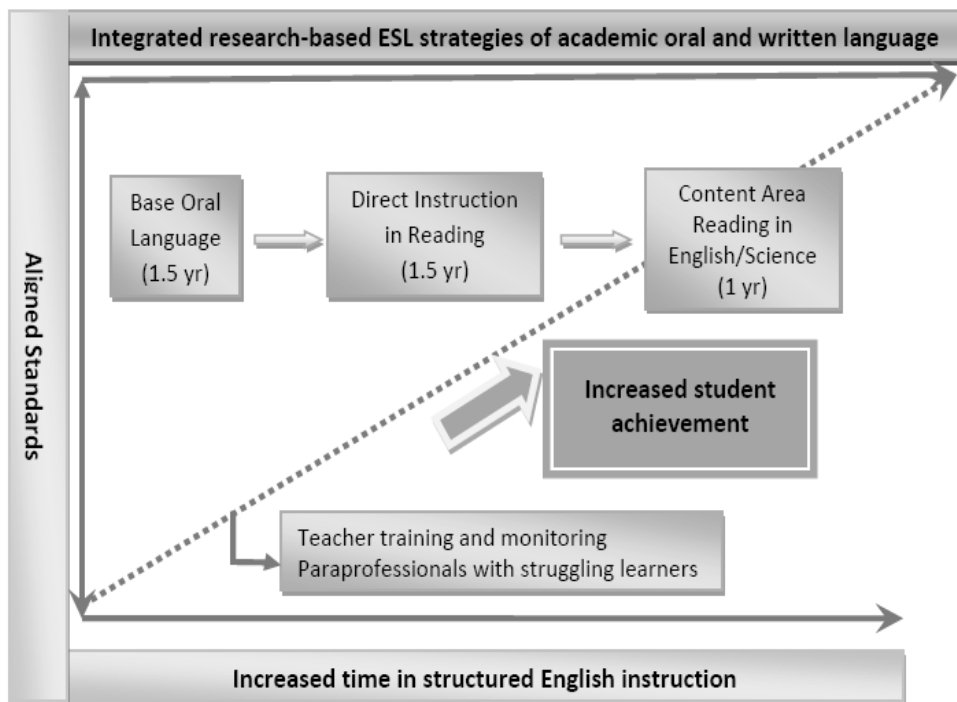
Principle #1. Effective Professional Development Reflects Best Available Research and Practice Related to Teaching ELLs

Project ELLA's professional development for teachers of ELLs was centered on scientifically-based instructional practices grounded in the latest research. In the Project ELLA professional development, there was a focus on the mastery of state academic and language standards for ELLs. Working over a 4-year time period with professional development at four grade levels, first, we identified of scientifically-based instructional practices for teaching ELLs.

The outcomes from the original Project ELLA are shown in the Framework in Figure 2. The ELLA Framework represents the basic structure of the original longitudinal intervention.

The longitudinal randomized trial study yielded strong evidence under the initial trial controlled conditions and indicated in Table 1.

Figure 2. ELLA framework



Noted in Figure 2, increased ELL student achievement occurred in a content-embedded literacy intervention when (1) curriculum was standards-aligned and inclusive of research-based ESL strategies of academic oral and written language with oral language practice conducted daily with academic language content from science was embedded; (2) there was increased time for structured English with science as the area of content for integration in all grade levels (from 45 minutes to 75 minutes in K, and 45 minutes to 90 minutes in 1-3 and struggling ELLs are provided increased time with structured tutorials; the way in which we were able to increase time during ESL was that *science* was included during this time period as the supporting content area); (3) oral language was developed in K and Grade 1 (1.5 years) in which students were purposefully speech engaged and then students moved to the next levels of needed instruction indicated in d and e following; (4) Direct Instruction in reading occurred in Grades 1 and 2 (1.5 years) with science and social studies content imbedded; (5) content area reading in science was structured and expository text was used in Grade 3; and (6) consistent and targeted teacher professional development with self-assessment and reflection and monitoring.

Bi-monthly professional development workshops were provided to teachers of bilingual/ESL students, who as a routine matter must be fully certified and recognized as highly qualified by the state of Texas, with 6 hours per month as a component of the intervention. The ELLA Professional Development included prepared training sessions that were outlined and scripted,

Table 1. Evidence from Project ELLA to support ELLA Scale-up

Study	Appears in	Grade level	Outcome measures	Statistical significance	Effect size
1.	Bilingual Research Journal (2009), 32(1), 77-100	K	WLPB-R Picture Vocabulary (PV), Listening Comprehension (LC)	$ps < .001$	Cramer's $V = .18$ (median)
2.	American Educational Research Journal (2008), 45(4), 1011-1044	K-1	PV, LC, Letter Word identification, Word Attack, Passage Comprehension (PC)	$ps < .001$	Cohen's $d = .68$ (Benjamini-Hochberg correction)
3.	Journal of Educational Research (in press)	K-1	CTOPP Blending Phonemes (BP), Segmenting Words (SW); WLPB-R PC, LC	$p = .003$	Partial eta squared = .11
4.	Elementary School Journal (2010), 110(4), 542-566	K-1-2	BP, SW; PV, LC, Memory for Sentences, Oral Vocabulary; IPT; Letter Name, Letter Sound; DIBELS-Oral Reading Fluency	$ps < .05$	Three level HLM (effect size is not appropriate)
5.	Hispanic Journal of Behavior Sciences (2008), 30(4), 500-529	K-1-2	WLPB-R PV, LC, Comprehensive Test of Phonological Processing (CTOPP)	$ps < .05$	Cohen's $d = .35$ (median) Formula
6.	Journal of Research in Reading (First published online Jan. 4, 2011; DOI: 10.1111/j.1467-9817.20100172.x)	K-1-2	Story grammar; PV, LC	$ps < .05$	partial eta squared $> .59$
7.	TABE Journal (2010), 12(1), 1-42.	K-1-2-3	Texas Assessment of Knowledge and Skills (TAKS), PV, LC	$p > .05$	$R^2 = .132$

along with video clips and training materials with the following activities: (1) reviewing and practicing upcoming lessons; (2) reflecting on and discussing student learning; (3) assessing pedagogical progress as a teacher in the intervention; (4) being instructed on the ESL strategies (for example, academic language scaffolding-visual, leveled questions, and total physical response and others as outlined in Table 2); (5) vocabulary building and fluency; (6) oral-language development and the importance of planned student talk with less teacher talk; (7) literacy development; (8) reading comprehension; (9) language of instruction clarifications in the bilingual classrooms; and (10) reflective practice via portfolio development.

Table 2. ELA ESL Strategies

Kinder	1 st	2 nd	3rd
Interactive Read Aloud	Interactive Read Aloud	Interactive Read Aloud	Interactive Read Aloud
Preview/Review	Preview/Review	Preview/Review	Preview/Review
Total Physical Response	Total Physical Response		
Academic Language Scaffolding	Academic Language Scaffolding	Academic Language Scaffolding	Academic Language Scaffolding
Think Aloud	Think Aloud	Think Aloud	Think Aloud
Leveled Questioning	Leveled Questioning	Leveled Questioning	Leveled Questioning
	Word Wall	Word Wall	Word Wall
	Advanced Organizers	Advanced Organizers	Advanced Organizers
	Bridging	Bridging	
	Cloze		
			Content Connections

Primarily, we utilized the work of Herrell and Jordon (2008) for the ESL strategies. All teachers in Project ELLA experimental classrooms were required to attend the professional development sessions twice a month, and they each received a \$3000 stipend. After the professional development sessions, the teachers were observed implementing the instruction learned from training, and they received feedback on the fidelity of the implementation. Project ELLA recorded data of student learning through an experimental design and via qualitative methodologies. Data collected during the implementation of the Project ELLA intervention further informed the teachers of ELLs of their instructional processes and the allowed us to discontinue ineffective practices. Principals are urged to apply such a professional development model based in research.

Principle #2. Effective Professional Development Facilitates Teachers’ Development in Subject-Matter Content, ESL/Bilingual Teaching Strategies, Use of Integrated Technologies, and Other Essential Elements in Teaching Standards-Aligned Curriculum

Much of the time, we have seen professional development focused on general topics such as gifted education, self-esteem, communication with parents, or math education. It hardly ever is individualized, planned, connected to the curriculum or the instructional needs of the teachers, subject matter, effective teaching strategies, or technology needs of the teachers, particularly of teacher of ELLs. It rarely connects teachers’ reflections on their practice and on their students’ achievement to professional development, and often the professional development we see is a one-time shot in the arm. There is no sustained effort to develop instructional knowledge and skills of the teachers that can ultimately lead to changed behaviors. Professional development is key in keeping teachers abreast of current issues in education, assisting them to implement new concepts or innovations, and improving their practice. Peery (2002) suggested that principals should nudge teachers into seeing their subject matter from students’ eyes.

Effective professional development for teachers of ELLs specifically should include (1) second-language acquisition theories; (2) integration of strategies that make content comprehensible while preserving its integrity; and (3) ongoing support through continued professional

development (Tong, et. al, 2008; Newman, 2010). Learning about how students acquire a second language helps teachers relate to their students and helps explain academic miscues of ELLs. Bowers et al. (2010) found that professional development opportunities provided by school districts influence the types of strategies teachers use in their classrooms; we found this to be true in Project ELLA as well.

Principle #3. Effective Professional Development Encourages Teachers' Improvement in Practice Through Inquiry

Researchers of professional development for the majority of teachers have supported (1) determining how the newly learned instructional practice is implemented in the classroom; (2) specific guidelines and materials for initial implementation; and (3) ongoing peer coaching (Fullan, 1999; Glickman, 1993; Fullan & Hargreaves, 1992; Joyce, 1990; Sparks & Loucks-Horsley, 1992). Incorporating peer coaching into the professional development design dramatically increases the implementation of the content of the training (Joyce & Showers, 1988). In a previous investigation of teachers who participated in professional development workshops but did not receive follow-up peer coaching, it was found that only 10% implemented the instructional strategy (Florida Department of Education, 1999).

In ELLA, we provided professional coaches for the experimental teachers. These coaches observed lessons, worked with teachers providing feedback one-on-one and during the professional development sessions twice a month. Additionally, one teacher was selected to present upcoming portions of lessons to share with the group during professional development, and coaching and reflection was incorporated at that time as well. The continuous observation and feedback loop monthly was critical to the success of the students.

Action Research

Inquiry and improvement through applied action research conducted by teachers who want to study their own classroom to improve in their own situation (Little, 2001) was actualized in Project ELLA. In action research, the teacher was the decision maker, data collector, and information source in the research situated in the classroom and recorded in his/her professional portfolio. Action research is a continuous process of planned inquiry to determine the effects of the implementation of an instructional practice on the outcomes of the students in a classroom (Little, 2001). The following represent general components in action research: define problems, formulate research questions, plan and implement interventions, collect data, draw conclusions, and make changes accordingly. In the professional portfolio, the Brown and Irby (2000) Reflection Cycle was used—select, describe, analyze, appraise, transform. According to the Wisconsin Center for Education Research (2001), action research as a professional development experience, can have a significant effect on teaching and learning, and we observed that phenomenon among the ELLA teachers. The ELLA teachers gained confidence in delivering the interventions as they reflected on their practice through the action research; they enjoyed learning new techniques, and they were able to articulate their findings with their colleagues and the coaches. They used the work they did in their evaluation portfolios on their campuses with their principals.

Evaluation Portfolio

Some states, such as Texas, have developed a professional development and appraisal system (PDAS) for teachers. The Texas PDAS is comprised of eight domains and is aimed at advancing the level of teachers' professional practice and promoting their continuous professional development (TEA, 1997). Principals can support teacher development by encouraging the inclusion of the teacher evaluation portfolio as an integral component of the PDAS or other like systems in various states. Just as our ELLA teachers were allowed to bring in their portfolios to their evaluations and share their findings from the classroom action research, it is recommended that this become a practice with all evaluations of teachers. According to Marcoux, Rodriguez, Brown, and Irby (2001), serving as a catalyst for revisions and modifications needed to improve the teacher's pedagogy and subsequent students achievement, the teacher's professional portfolio can (1) provide an organized and systematic vehicle for documentation and reflection in all eight domains in the PDAS; (2) demonstrate strengths and target areas for needed improvement; and (3) offer teachers ownership of their own evaluations. The ELLA teachers included artifacts and reflections on their coaches' observations, their action research findings, parental involvement evidence from ELLA, and an ELLA teaching lesson. Other examples that are suggested for inclusion are: videotapes of lessons or lesson plans, certificates from workshops or staff development sessions, presentations to colleagues, and class newsletters or other examples that feature student achievement in the classroom or school (Brown & Irby, 1997).

The principal must understand that the ability for the teacher to self-evaluate and reflect upon experiences portrayed by selected artifacts that demonstrate actual teaching practices and highlight and demonstrate knowledge, skills, and attitudes of the teacher in relation to his/her work is key to the teacher portfolio process and teacher growth. As a teacher reflects on his/her practice, he/she is able to critically self-assess the impact of a particular lesson or strategy and clarify future goals and plans for professional development aimed at improved pedagogy. Use of the Reflection Cycle as indicated previously offered the ELLA teachers the structure for in-depth teacher reflection and furthered the action research process.

The portfolio evaluation process encourages collegial interaction among administrators and teachers, providing an avenue for two-way communication (Brogan, 1995; Brown & Irby, 2001). During the final evaluation conference, the ELLA teachers, while referring to concrete examples in their portfolios, shared with the principal areas of professional growth over the course of the specified school year, reflected on professional development goals that had been accomplished, and offered a transformative plan for new goals for the upcoming year. Accordingly, the principal sought clarification, gave feedback, and offered suggestions for setting professional growth goals. In this process, the principal became a part of the professional development process and empowered the ELLA teachers who then actually assumed the major responsibility for their own growth and development. Collectively, the ELLA teachers met and dialogued about their portfolios and research findings; in this instance, we concluded that the action research encapsulated in the portfolio, increased communication.

Principle #4. Effective Professional Development Involves Substantial On-Going Time Commitment on the Part of the Teachers and the Developers

In Project ELLA, we devoted time for planning professional development that was systemically connected to the ELLA curriculum and instructional needs of ELLs and the ELLA research targets. In the grant proposal, we advocated for funding to support professional development. We paid the teachers to attend the sessions a total of \$3000 per year. In addition to the time devoted to planning, there was time devoted to observing the teachers and to providing feedback. Observation and feedback loops generally are not used in professional development due to the large time commitment and scheduling issues, but our research in ELLA indicate that these are time commitments worth doing in terms of the impact on ELLs learning. So, it is important, in any school budget, even in these hard times, for principals to consider from 3 to 10% of the school budget, and 25% of teachers' and coaches' time devoted to professional development inclusive of observation, dialogue, and feedback. Additionally, we found that on-going, consistent, and timely professional development was the most advantageous for teacher of ELLs.

Principle #5. Effective Professional Development is Assessed Related to the Impact on Teacher Effectiveness and ELLs' Learning, and this Assessment Guides Subsequent Professional Development Efforts

Current research on professional development, which has shown that professional development must be embedded in teachers' daily work to improve student learning, has led school boards and administrators across the country to evaluate the results of their investment in adult learning. The standards movement, along with the push to increase the use of data in educational decision making, has intensified the pressure on school administrators to prove that professional development is showing positive results. (Kelleher, 2003, p. 751).

Evaluating the professional development session through a survey at the end of the session is not sufficient; although that is the typical way in which professional development is evaluated. The issue is not how much the teacher's liked the session; rather, the issue is what effect the professional development has on student learning (Richardson, 2000).

There may be those who believe that there is not a link between professional development and student improvements in achievement, and perhaps there are *no* links in the *one-time shot in arm* professional development. However, when we determined with the ELLA students that they were achieving at or above state or district standards in reading, we determined from the quantitative studies that the quality intervention worked and that within this intervention was professional development that was ongoing, sustained, and connected to the state curriculum standards.

According to the Iowa Association of School Boards (2003), a growing body of evidence indicates that teacher effectiveness is not fixed, and that when teachers of all experience levels learn powerful skills and methods to use with students in the classroom, student achievement increases. They suggested that to accomplish this end result, professional development must be (1) grounded in student need in an academic content area; (2) research-based; (3) collaborative

and ongoing; (4) embedded in the system; (5) built on effective training processes; (6) involve all administrative levels in support and planning; (7) connected to school improvement and aligned with the curriculum standards and assessed needs of the students, as well as the self-assessed needs of the teachers; and (8) monitored (effective professional development is monitored for implementation and results).

Conclusions

We have concluded, from the work we conducted in professional development within Project ELLA with teachers of ELLs, that principals first should plan a comprehensive, research-based, and on-going professional development strand for their teachers of ELLs. Careful and consistent planning is necessary. Second, they are encouraged to provide resources, including time and money, and to include “time for teachers to reflect upon and participate in a dialogue about their practice” (Lunenburg & Irby, 2006, p. 121). Third, it is also incumbent upon principals to provide coaches for the teachers of ELLs who are knowledgeable of the field and who can offer feedback on a consistent basis with respect to their individual and collective needs. Fourth, the professional development delivered to ELLA was connected and imbedded in the research goals of the project and the intervention; thus, the lesson learned there for principals is that when they plan professional development, it should be connected with the state standards, the local curriculum, the assessments, and the campus plan. ELLA teachers, via the successful professional development model and following the principles outlined, increased interest in their work, reflected for improved practice, and increased their commitment to the intervention for the success of their English language learning students. With such a model, principals focus their efforts to raise the quality of professional development on their campuses so that teachers of ELLs receive the maximum benefit toward improving their practice.

References

- Bowers, E., Fitts, S., Quirk, M., & Jung, W. (2010). Effective strategies for developing academic English: Professional development and teacher practices. *Bilingual Research Journal*, 33, 95-110.
- Brogran, B. R. (1995). *The case for teacher portfolios*. Paper presented at the 47th annual meeting of the American Association of Colleges for Teacher Education, Washington, DC. (ERIC Document Reproduction Service No. ED 381516).
- Brown, G., & Irby, J. (1997). *The principal portfolio*. Thousand Oaks, CA: Corwin Press.
- Brown, G., & Irby, B. J. (2000). *The career advancement portfolio*. Thousand Oaks, CA: Corwin.
- Desimone, L. (2009). Improving impact studies of teachers’ professional development: Toward better conceptualizations and measures. *Educational Research*, 38(3), 181-199. DOI: 10.3102/0013189X08331140.
- Florida Department of Education. (1999). *Impact of staff development* (Issue brief.) Tallahassee: Author.
- Frechtling, J., Sharp, L., Carey, N., & Vaden-Kiernan, N. (1995). *Teacher enhancement programs: A perspective on the last four decades* [Monograph]. Arlington, VA: National Science Foundation Directorate for Education and Human Resources.
- Fullan, M. (1999). *Change forces: The sequel*. Bristol, PA: Falmer Press.

- Fullan, M., & Hargreaves, A. (1992). *What's worth fighting for? Working together for your school*. Toronto: Elementary Teachers Federation of Ontario.
- Glickman, C. (1993). *Renewing America's schools: A guide for school based action*. San Francisco: Jossey-Bass.
- Guskey, T.R., & Bailey, J. (2000). *Developing grading and reporting systems for student learning*. Thousand Oaks, CA: Corwin.
- Hawley, W.D., & Valli, L. (1999). The essentials of effective professional development: A new consensus. In L.Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp.127-150). San Francisco, CA: Jossey-Bass Publishers.
- Herrell, A. L., & Jordan, M. (2008). *50 strategies for teaching English language learners*. Upper Saddle River, NJ: Pearson Education, Inc.
- Iowa Association of School Boards. (n.d.) *Professional development: A key strategy for improving student learning*. Retrieved from <http://www.iasb.org/studentachievement/staffdevelopment.asp>
- Joyce, B. (1990). *Changing school culture through staff development. The 1990 ASCD yearbook*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kelleher, J. (2003). A model for assessment-driven professional development. *Phi Delta Kappan* (June), 751-756.
- Kennedy, M. (1998). *Form and substance in inservice teacher education*. Madison, WI: National Institute for Science Education.
- Knowles, M. (1980). *The modern practice of adult education*. Englewood Cliffs, NJ: Cambridge Adult Education.
- Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Education Evaluation and Policy Analysis*, 15, 129-151.
- Lunenburg, F. C., & Irby, B. J. (2006). *The principalship: Vision to action*. Belmont, CA: Wadsworth/Cengage Learning.
- Marcoux, J. S., Rodriguez, L., Brown, G., & Irby, B.J. (2001). Enhancing teacher quality: How portfolios can help. *Insight*, 15 (2), 24-25.
- Newman, K.L., Samimy, K. & Romstedt, K. (2010). Developing a training program for secondary teachers of English language learners in Ohio. *Theory into Practice*, 49:2, 152-161.
- Peery, A. (2002). Beyond inservice. *Principal Leadership*, 3(3). Retrieved December 2, 2002, from http://www.principals.org/news/pl_beyondsvc_1102.html.
- Renyi, J. (1996). *Teachers take charge of their learning: Transforming professional development for student success*. New York: National Foundation for the Improvement of Education.
- Richardson, V. (2000). The dilemmas of professional development. *Phi Delta Kappan*, 84 (5), 401-406.
- Sparks, D., & Hirsch S. (1997). *A new vision for staff development*. Alexandria, VA and Oxford, Ohio: Association for Supervision and Curriculum Development and National Staff Development Council.
- Sparks, D., & Loucks-Horsley, S. (1992). *Five models of staff development for teachers*. Oxford, OH: National Staff Development Council.
- Texas Education Agency. (1997). *The professional development appraisal system handbook*. Austin, TX: Author.

- Tong, F., Lara-Alecio, R., Irby, B. J., Mathes, P., & Kwok, O. (2008). Accelerating early academic oral English development in transitional bilingual and structured English immersion programs. *American Educational Research Journal*, 45, 1011-1044.
- Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209.
- Wisconsin Center for Education Research (2001). *Teacher research spurs professional development*. Retrieved from http://www.wcer.wisc.edu/news/coverstories/teaching_research_spurs_prof_dev.php