



Western Washington University
Western CEDAR

WWU Honors Program Senior Projects

WWU Graduate and Undergraduate Scholarship

Spring 2006

Oracy to Literacy: How Can Speech-Language Pathologists in the Schools Collaborate with Teachers Regarding Literacy?

Victoria L. Goodall
Western Washington University

Follow this and additional works at: https://cedar.wvu.edu/wwu_honors



Part of the [Speech Pathology and Audiology Commons](#)

Recommended Citation

Goodall, Victoria L., "Oracy to Literacy: How Can Speech-Language Pathologists in the Schools Collaborate with Teachers Regarding Literacy?" (2006). *WWU Honors Program Senior Projects*. 191. https://cedar.wvu.edu/wwu_honors/191

This Project is brought to you for free and open access by the WWU Graduate and Undergraduate Scholarship at Western CEDAR. It has been accepted for inclusion in WWU Honors Program Senior Projects by an authorized administrator of Western CEDAR. For more information, please contact westerncedar@wwu.edu.

Oracy to literacy: How can speech-language pathologists in the schools collaborate with teachers regarding literacy?

Victoria L. Goodall

Spring 2006
WWU Honors Program Senior Project
Project Advisor: Eva Baharav, Ph. D., CCC-SLP

Honors Program

HONORS THESIS

In presenting this Honors paper in partial requirements for a bachelor's degree at Western Washington University, I agree that the Library shall make its copies freely available for inspection. I further agree that extensive copying of this thesis is allowable only for scholarly purposes. It is understood that any publication of this thesis for commercial purposes or for financial gain shall not be allowed without my written permission.

Signature _____

Date 5/31/06

Systematic change lies in our understanding how our children learn and in our ability to problem-solve with colleagues who work with our children, who share our common experiences, and who speak our language of literacy.

(Staskowski & Zagaiski, 2003, p. 213)

The concept of a connection between oral language and literacy is not new. However, prior to the 1990s, this relationship was not given the substantial credit it deserves (Butler, 1999). In attempt to describe this connection, the term “oracy” has been created. The word “oracy” encapsulates the concept of oral communication and comprehension as building the foundation for literacy. Recent research has brought the significance of this idea to the attention of those involved in literacy in the schools. As a result of changes in our understanding of how children become literate, professionals involved in literacy must adapt to broadened roles and expectations. Speech-language pathologists (SLPs) are among the professionals most impacted by this current focus on the oral language basis for later literacy skills. As research evolves and gains further support, SLPs are called to expand their roles in the schools to include the area of literacy.

With a strong background in oral language, SLPs act as a very beneficial resource for other professionals involved in literacy learning. In light of current research promoting the connection between oral language skills and emergent literacy, SLPs are challenged to take on new roles and responsibilities in this arena. As with developments in any field, these changing expectations for SLPs with regards to literacy take time to implement. Before new expectations are successfully incorporated into the school SLP’s agenda, the roles must first be understood, valued and accepted by other professionals with whom the SLP might collaborate. Teachers are an especially important factor in this equation.

Until recent years, literacy instruction has been primarily the domain of elementary school teachers. With changing roles and responsibilities regarding literacy, SLPs are becoming increasingly involved in collaborating with classroom teachers to focus on literacy issues. In order for this expanding relationship to succeed, all parties involved must be willing to modify their individual roles and work as a team for the purpose of literacy.

This paper serves several purposes: First, it attempts to explain the important connection between oral and written language. With this link in mind, this paper then describes the current roles and responsibilities of the school speech-language pathologist regarding literacy in the schools. Additionally, it will summarize findings on the current level of collaboration between teachers and SLPs in the Lake Stevens School District in Washington State, based on a survey conducted as part of the present investigation. Finally, this paper aims to promote and provide suggestions for collaboration between SLPs and teachers with regards to literacy learning, based on the information obtained.

Oracy to literacy

In hindsight, the relationship between oral and written language appears blatantly evident to many individuals in the field of literacy instruction. In order to understand why this connection was not acknowledged sooner, we must first examine the roadblocks that prevented in-depth investigation into this relationship until recent years.

Teachers have traditionally filled the role of being reading and writing instructors. Throughout the early school years, children are formally taught to read and write. Oral language was not previously seen as a focus of this literacy learning. A child presenting with oral communication issues would be seen by the school SLP. Roles were divided

such that reading was covered by the teacher and spoken language was the SLP's professional focus. Due to this clear division in roles, teachers and SLPs focused on their individual areas of expertise rather than view the two as intertwined. (Butler, 1999)

Progress towards collaboration between professionals in the literacy arena has been slow relative to research findings on the importance of an oral basis for reading and writing. As Burns, Scarborough and Snow (1999) stated, "A characteristic of the last twenty years of research on language development and on literacy is that these two fields are coming ever closer together." (p. 49)

It is also important to recognize that there were some "early pioneers" who documented this relationship (Butler, 1999): The idea that these two fields are interconnected is not so much newly discovered as it is newly acknowledged. According to van Riper (1956) (as cited in Butler, 1999), after implementing weekly in-class "speech-improvement" periods in elementary school classrooms, students showed improvements in both spoken and literate language. "They indicated that not only had the children's oral speech improved, but there were significant increases in students' decoding skills as evidenced by the children's advancement from Blue Birds to Red Birds reading groups."(p. 21). Past documentation shows the discovery of a link between oral and literate language, while recent research further investigates and significantly strengthens this concept to the degree it deserves.

The American Speech-Language-Hearing Association (ASHA) best explains this connection through their justification for SLP involvement with literacy in their document entitled, *Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents* (2001). The rationale which

ASHA provides for the importance of SLPs' direct role in regards to literacy is based on "established connections between spoken and written language." (ASHA, 2001, p. 1) These connections regard oral language as the basis for literacy development so that both of these domains influence overall language and literacy proficiency. Additionally, it has been shown that children with oral language difficulties often have problems learning to read and write and vice versa. Research has also shown that intervention with spoken language difficulties often simultaneously promotes growth in literacy learning. (ASHA, 2001)

In addition, research on the topic of emergent literacy has provided further support for the relationship under discussion. "The term *emergent literacy* is used to describe pre-literate children's skills related to reading and writing before their achievement of conventional literacy." (Justice & Kaderavek, 2004, p. 202) These emergent literacy skills lay the basis for future reading and writing. Underlying skills in phonological awareness, understanding of print concepts and alphabet knowledge are labeled as vital precursors to literacy. At the same time, Justice and Kaderavek (2004) note that because reading, unlike oral language, was not necessarily biologically preprogrammed and did not develop naturally in all children, many children---if not all---would benefit from direct teaching of these foundational literacy skills. Additional research has shown that children with language impairment are in particular risk for acquiring these foundational literacy skills.

Phonological awareness is repeatedly mentioned as a key foundational skill for reading and writing. Burns et al. (1999) define phonological awareness as, "perceiving, separating, and classifying the syllables, phonemes, and other subsyllabic elements that

words are composed of.”(p. 5). Basically, this is the ability to distinguish and use the various sounds in a language. “Children with expressive phonological disorders are at risk for reading and spelling disabilities and poor phonological awareness skills are linked to poor reading and spelling skills.” (Ahmed, Apel, Lombardino & Masterson, 2000) When children struggle with phonological awareness in spoken language, their experience with learning to read and write often suffers as well. Lacking phonological awareness is currently thought of as a core deficit in children with reading disabilities (Butler, 1999). If a child cannot distinguish the sounds of a spoken word, how can he or she be expected to distinguish the sounds when converted to letters on paper?

When a child encounters spoken language deficits the likelihood that he or she will experience difficulties with reading and writing increases dramatically due to this link. “Reading is intimately related to oral language. Success demands the integrity of phonological, semantic, syntactic, and pragmatic aspects of language. For the reading disabled child, these aspects must be assessed and developed.” (Stark, 1981, as cited in Butler, 1999, p. 13) Based on conclusions such as this, the need for collaboration between teachers and speech-language pathologists on literacy issues is made evident. With expertise in language development and disorders, SLPs offer insight to language-based reading issues. On the other hand, teachers have extensive background knowledge in reading and writing matters. Coming together with their individual strengths, teachers and SLPs can collaborate to approach all aspects of literacy.

Roles and responsibilities of the SLP involving literacy

In response to the connection between oracy and literacy, the American Speech-Language-Hearing Association has developed a set of guidelines for SLPs with regards to literacy. As outlined by the document *Roles and responsibilities of the speech-language pathologist with respect to reading and writing in children and adolescents* (ASHA, 2001), speech pathologists are expected to fulfill a variety of roles with regards to literacy. These roles include prevention, identification, assessment of written language and literacy intervention. Additionally, SLPs are responsible for offering research based intervention programs that are relevant to the individual child's situation. They are expected to provide treatment that is adequate culturally and developmentally and is curriculum appropriate. Lastly, ASHA states that SLPs should collaborate with other professionals and individuals in the clients' lives to explain their abilities and act as a resource. (ASHA, 2001)

As cited in ASHA (2001, p. 4), as many as half of all poor readers have an early history of spoken-language disorders. With this knowledge, it becomes evident that SLPs have the ability to play a vital role in preventing literacy issues. As mentioned previously, the development of emergent literacy skills is a good predictor of future reading abilities. Consequently, early speech and language intervention can help prevent or lessen a child's predicted difficulties with literacy. It is the role of the SLP to provide exposure to language and to provide opportunities for participation in emergent literacy activities. ASHA (2001) provides a collection of strategies for SLPs to use in the prevention of literacy problems. These approaches include joint-book reading with an adult, promoting print awareness, understanding basic print rules, exposure to writing materials and

understanding narrative structure. While not limited to these strategies, SLPs might enlist them as a good starting point in their role of preventing literacy problems.

In addition to prevention, speech-language pathologists are expected to correctly identify those children with either potential or actual literacy problems. “The goal of identification is to locate children who are at risk for reading and writing problems before they experience failure.” (Wilson & Risucci, 1988) (as cited in ASHA, 2001) However, this early identification is not always feasible and SLPs must be aware of their role in identifying older students with literacy problems as well. SLPs are expected to design and implement activities in order to observe students’ literacy skills and struggles. Educating teachers and other professionals on the aspects of language that are associated with literacy is another important task of the SLP in early identification. It is equally important for teachers to understand warning signs in older students who show signs of struggle with literacy. SLPs are also expected to reassess older students with language deficits to look for potential existing reading difficulties.

Based on knowledge of language and written language development, SLPs are expected to assess students’ written language with the collaborative help of teachers and other professionals involved in literacy (ASHA, 2001). Assessment allows the SLP to determine the specific areas which should be focused on in intervention. When students indicate difficulties with reading, SLPs must first determine not only if the presenting problems result from decoding, comprehension or a combination of difficulties, but also “bring to this process their ability to assess the subsystems of language---phonology, morphology, syntax, semantics and pragmatics---as they relate to spoken and written language.”(ASHA, 2001, p. 8)

After a child identified with literacy learning difficulty has been assessed, SLPs are called to provide appropriate intervention as defined by ASHA guidelines (ASHA, 2001). The SLP is expected to plan and implement curriculum-based, individualized intervention for students who present with language and literacy difficulties. Providing assistance and making needed modifications in the general-education classroom as required by IDEA (Individuals with Disabilities Education Act) (U. S. Congress, 1997), along with collaborating with the primary literacy teachers are also expectations in intervention. Classroom-based therapy and SLP involvement in curriculum planning is also highly encouraged by ASHA. In summary, “They (SLPs) must ensure that students with special needs receive intervention that builds on and encourages the reciprocal relationships between spoken and written language.” (ASHA, 2001)

Speech-language pathologists must be sure to provide an intervention plan that is research based, balanced in focus, developmentally appropriate to the child and relevant to the student’s life (ASHA, 2001). The ability of the student to generalize what is learned during intervention to all relevant situations in the student’s life is an important aspect of successful treatment. Consequently, it is the responsibility of the SLP to ensure that intervention techniques allow for a carry-over of acquired language and literacy skills and strategies to the student’s functional life at school.

All of these aspects in intervention require that speech-language pathologists collaborate with other knowledgeable professionals to achieve maximum benefit of treatment.

Existing levels of collaboration: Surveying the Lake Stevens, WA School District

Based on extant research and recently defined literacy roles for SLPs, as outlined by ASHA, it becomes evident that collaboration between professionals is sorely needed. In order to determine what degree of collaboration is currently implemented within schools, the present project includes a survey conducted in the Lake Stevens, Washington School District to examine the degree of collaboration that is taking place between teachers and SLPs.

Method and Participants

Two online questionnaires were created and were specific to either teachers or SLPs. The questionnaire for the teachers included twelve questions, and the questionnaire for the SLPs included nineteen questions.

Nine speech-language pathologists and sixty-seven teachers received the survey in April 2006. The final number of SLP participants included five subjects, resulting in a 56% response rate. In total, eighteen responses from teachers were obtained resulting in a 27% response rate. However, because only two responses were from high school teachers, they were not included in the analyses as this study focuses on early literacy attainment.

Results

SLP survey results

The first section of the SLP survey asked participants to rate their involvement in various aspects of literacy. These aspects included phonological awareness, spelling, reading, oral basis of reading material, oral basis of writing material and classroom collaboration (theme-based). SLPs were asked to describe their level of involvement as

either “very involved”, “somewhat involved” or “not at all”. Table 1 summarizes the level of SLPs’ involvement in various aspects of literacy in their school:

Table 1: *SLPs’ involvement levels in various aspects of literacy in school*

Level of involvement	Phonological awareness	Spelling	Reading	Oral basis of reading material	Oral basis of writing material	Classroom collaboration
Very:	4 (80%)	1 (20%)	0	0	1 (20%)	2 (40%)
Somewhat:	1 (20%)	3 (60%)	4 (80%)	4 (80%)	3 (60%)	2 (40%)
Not at all:	0	1 (20%)	1 (20%)	1 (20%)	1 (20%)	1 (20%)

In the second section of the survey, SLPs were asked the question: “Do you meet with school teachers and specialists to plan intervention for students on your caseload?” To this question, 4/5 (80%) responded “yes” and 1/5 (20%) responded with “no”. SLPs were also asked, “What level of collaboration (between teachers and SLPs with regards to literacy) do you feel exists presently at your school?” Given the options of “poor”, “fair”, “average”, “good” or “excellent”, 4/5 (80%) responded with “fair” and 1/5 (20%) responded as “poor”. No SLPs responded that collaboration was either “average”, “good” or “excellent”. Figure 1 indicates:

Figure 1: *Existing levels of collaboration on literacy instruction (according to SLPs)*



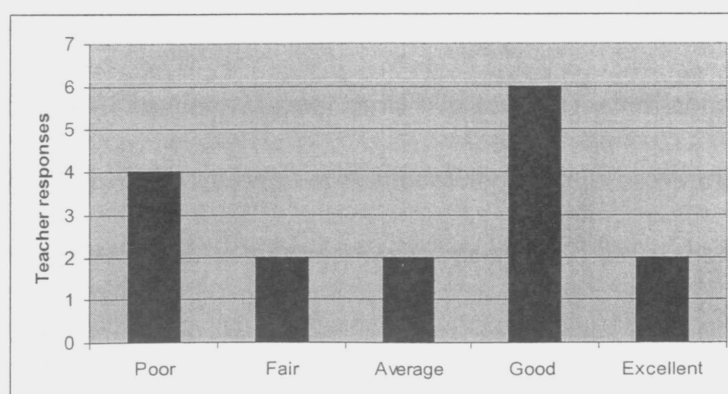
The survey then asked participating SLPs to describe their perceptions of the role of a school SLP with regards to literacy. While responses varied between participants, 4/5 (80%) of speech-language pathologists discussed the reciprocal relationship between language and literacy. Three (60%) SLPs also mentioned the importance of phonological awareness as a language skill needed for reading and writing.

SLPs were also asked to “Provide any specific examples of how you have collaborated regarding students who struggle with literacy”. Three of the five participants responded that they implement phonological awareness activities within the classroom. Additionally, four of the five SLPs mentioned sharing materials with teachers or planning curriculum-based activities. For example, one SLP mentioned working on curriculum-based spelling lists with students.

Teacher survey results

In the first section of the teacher survey, teachers were asked, “Do you meet with the SLP at your school to help plan intervention for students on their caseload?” Eleven out of sixteen (69%) teachers responded “yes”, while the remaining five (31%) responded “no”. Teachers were also asked the question regarding the level of collaboration in existence between SLPs and teachers with regards to literacy. Figure 2 indicates the existing levels of collaboration on literacy according to teachers. Based on the scale from “poor” to “excellent”, 4/16 (25%) responded “poor” and 2/16 (12.5%) of teachers responded “fair”. Of the remaining ten teacher respondents, 2 (12.5%) described collaboration as “average”, 6 (37.5%) as “good” and 2 (12.5%) labeled it as “excellent”.

Figure 2: Existing levels of collaboration on literacy instruction (according to teachers)



Teachers were also asked to describe their perceptions of the role of the school SLP with regards to literacy. Based on a qualitative analysis, six teacher responses (37.5%) demonstrated a good understanding of the role of the SLP with regards to literacy. These particular responses mentioned the concept of oral/literacy connection and how speech difficulties can impact reading skills. Responses categorized as “fair” demonstrated some recognition of the SLP as qualified to aid in literacy instruction, but did not give reasoning or show an understanding of how SLPs can help collaborate. Seven teachers (43.75%) provided responses that acknowledged the speech-language pathologists ability to help with students’ literacy issues, but did not explain why or how. The remaining three teachers (18.75%) wrote that either they did not know about the expectation of SLP involvement with literacy or that they were unsure of what the role included.

Conclusions

Responses to the first section of the SLP survey, which investigated SLP levels of involvement in various literacy aspects, indicate that SLPs in this subject group are

most involved with phonological awareness. However, other aspects of collaboration investigated, namely spelling, oral basis of writing material and classroom collaboration show more varied responses and display a variety of involvement levels. Responses to reading and oral basis of reading material show a lower level of collaboration than the other aspects. From this information, it appears collaboration is most present with regards to phonological awareness and lacking most with reading and the oral basis of reading material.

When asked if they meet with other professionals (either teachers or SLPs) to plan intervention, 80% of SLPs answered “yes” in comparison to “69% of teachers. This difference could be the result of various factors. It might be due to a difference in the number of teacher and SLP subjects. Another possibility is that the subjects’ definition differs in regards to what “meet” means in the posed question. Despite the minor difference in SLP and teacher responses, the results of this question are taken to be a promising sign of existing collaboration.

Both teachers and SLPs were asked to rate the current level of collaboration regarding literacy at their school. The findings from this question show the majority of teachers describing collaboration as average or above average, while the SLP responses demonstrated a consensus of collaboration as below average. This difference in responses indicates that a potential gap exists between teacher and SLP understanding of the roles SLPs are expected to fill with regards to literacy.

When asked to describe their perceptions of the role of the school SLP with regards to literacy, teachers provided a variety of answers, while the SLPs were fairly consistent in their description. Four out of the five SLP answers discussed the connection

between oral and written language, in addition to the importance of phonological awareness. In comparison, only six of the sixteen teachers provided answers similar in level of understanding to those of the SLPs. The remaining nine teachers either did not show a grasp of how SLPs can help with literacy or simply stated that they were unaware that the SLP role involved literacy. From this information, it can be seen that clarification on the role of the SLP with regards to literacy is necessary. In order to use speech-language pathologists as a resource, teachers must first understand the role SLPs play regarding literacy.

Overall, the survey demonstrates some degree of collaboration between SLPs and teachers. While collaboration does exist to varying degrees, it has become clear that all schools involved could benefit from increased teacher-SLP collaboration regarding literacy.

Suggestions for collaboration

Increasing communication is a vital first step towards creating collaboration. “When others understand and value the SLP’s role, it is not a chore to let the SLP know what is happening but rather a necessity.” (Stastkowski & Zagaiski, 2003, p. 203) As my research demonstrated, a substantial gap exists between teachers and speech-language pathologists in their understanding of the role of the SLP with regards to literacy and, as a result, their perception of the current level of collaboration. In regards to oracy and literacy, SLPs may need to clarify their role to teachers in these important areas (Sanger & Shaughnessy, 2005, p. 11) With a better understanding of the role of the SLP with regards to literacy, teachers can turn to the SLP for help with students who are currently

struggling or are at risk for literacy difficulties. Additionally, the SLP can play a broader role in remediation by alerting teachers when a child's language impairment predisposes him or her for being at risk for future reading difficulties as the curricular demands in reading increase (Burns et al., 1999). If the school based SLPs were to advocate their role with literacy and the oral basis of written language, teachers would more likely identify children who might be at risk for literacy difficulties, a factor that bears great significance on the No Child Left Behind Act (U.S. Department of Education, 2002). With increasing emphasis on standards for literacy, as dictated by the No Child Left Behind Act, SLPs are a practical resource for teachers.

One practical method for attaining this could be an informal meeting with teachers where the SLP can explain his or her role and inform teachers about warning signs of literacy issues. A more time intensive method is described in Farber and Klein's (1999) article on a collaborative intervention program. Teachers and SLPs met for a two day workshop which gave them an opportunity to review curriculum and plan for collaborative instruction (Farber & Klein, 1999). This type of communicative and collaborative opportunity is ideal, but realistically not feasible for most schools due to time constraints and heavy caseloads. However, the idea for increased communication is important and can be done in a less formal setting.

Beyond explaining the role of the SLP to teachers, maintaining frequent communication remains vital to collaborative efforts within the school setting (Staskowski & Zagaiski, 2003). Both teachers and SLPs must be clear with expectations for students, methods for intervention and progress updates. With increased

communication and understanding of roles comes the opportunity for more collaborative intervention efforts.

Based on IDEA's requirements on intervention in the least restrictive environment, classroom involvement is often beneficial to the process of literacy intervention. When therapeutic services are delivered in the classroom setting, opportunities increase for the SLP to address authentic communication events, including reading and writing (Ehren & Ehren, 2001, p. 238). Before intervention can occur within the classroom setting, SLPs must have an understanding of the teacher's methods and approaches regarding literacy and teaching in general. In accomplishing this, "Some SLPs find that simply observing in a classroom during language arts instruction opens up many possibilities for supporting reading and writing through language intervention." (Staskowski & Zagaiski, 2003, p. 212) From observation and communication with the teacher, SLPs can determine how to best integrate intervention practices into the classroom setting.

The promise of collaboration is immense in the world of literacy learning. With different backgrounds and areas of expertise, SLPs and teachers compliment each other with their abilities to help children with literacy struggles. Utilizing frequent communication and an understanding of roles and methods for teaching, teachers and SLPs can successfully collaborate to work towards student literacy success.

Further investigation

Based on investigation of the existing levels of teacher/speech-language pathologist collaboration with regards to literacy in the schools, it has become evident

that further research needs to be carried out. My research focused solely on the Lake Stevens, Washington School District. A comparison study of several districts would be very beneficial. Comparing multiple districts would allow for a better understanding of widespread progress, or lack thereof, with regards to collaboration on literacy matters. Additionally, a comparison would give more insight into what works for attaining collaboration based on actual experiences. It might also be interesting to examine a specific focus at a more in-depth level. One such focus might be teacher understanding of the SLP roles with respect to literacy. Research on this specific topic might result in a better comprehension of what information is lacking and acting as a road-block to future collaboration. There are many varied opportunities for future research in the area of collaboration between teachers and SLPs with regards to literacy.

The results of the present investigation make it obvious that teacher and speech-language pathologist collaboration is an invaluable resource in both prevention and intervention for students struggling with the acquisition of literacy. Significant steps have been made towards the support and implementation of collaboration, including a great deal of research on the oral language basis of literacy and the recent creation of ASHA guidelines for the SLP with regards to literacy. However, it is important to recognize that change is slow and often difficult. Taking small steps towards collaboration is the best method to implement gradual and successful change (Staskowski & Zagaiski, 2003). Teacher and SLP communication is vital to progress and must begin with understanding one another's areas of expertise, roles and expectations. With patience and fortitude, collaboration is a realistic and valuable goal for those involved in literacy.

References

- American Speech-Language-Hearing Association. (2001). Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents.
- Apel, K., Masterson, J. J., Lombardino, L. J., Ahmed, S. T., et al. (2000). What is the role of the speech-language pathologist in assessing and facilitating spelling skills. *Topics in Language Disorders, 20*, 83-93.
- Butler, K. G. (1999). From oracy to literacy. *Topics in Language Disorders, 20*, 14-32.
- Cohen, S. S., Thomas, C. C., Sattler, R. O., Morsink, C. V. (1997) Meeting the challenge consultation and collaboration: Developing interactive teams. *Journal of Learning Disabilities, 30*, 427-432.
- Ehren, B. J. (2000). Maintaining a therapeutic focus and sharing responsibility for student success: Keys to in-classroom speech-language services. *Language, Speech and Hearing Services in Schools, 31*, 219-229
- Ehren, B. J., & Ehren, T. C. (2001). New or expanded literacy roles for speech-language pathologists: Making it happen in the schools. *Seminars in Speech and Language, 22*, 233-242.

- Farber, J. G., & Klein, E. R. (1999). Collaborative-based assessment of a collaborative intervention program with kindergarten and first-grade students. *Language, Speech and Hearing Services in Schools, 30*, 83-91.
- Ferguson, M. L. (1992). The transition to collaborative teaching. *Language, Speech and Hearing Services in Schools, 23*, 371-372.
- Justice, L. M., & Kaderavek, J. N. (2004). Embedded-explicit emergent literacy intervention I: Background and description of approach. *Language, Speech and Hearing Services in Schools, 35*, 201-211.
- Shaughnessy, A., & Sanger, D. (2005). Kindergarten teacher's perceptions of language and literacy development, speech-language pathologists, and language interventions. *Communication Disorders Quarterly, 26*, 67-86.
- Snow, C. E., Scarborough, H. S., & Burns, M. S. (1999). What speech-language pathologists need to know about early reading. *Topics in Language Disorders, 20*, 48-58.
- Staskowski, M., & Zagaiski, K. (2003). Reaching for the stars: SLPs shine on literacy teams. *Seminars in Speech and Language, 24*, 199-213.