Multimedia Shared Stories

Teaching Literacy Skills to Diverse Learners

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Alba is a 5-year-old Mexican American girl enrolled in kindergarten this year. Her parents are originally from Mexico and immigrated to America, where Alba was born. Her parents can speak some English but are more comfortable speaking their primary language of Spanish. When Alba was enrolled in kindergarten, a battery of assessments was conducted and school psychologists identified Alba has having an intellectual disability. Alba can speak Spanish and English but is more comfortable speaking Spanish. Despite her bilingualism, Alba experiences significant language delays, sometimes displays erratic behaviors (e.g., screams, jumps up and down when upset), and demonstrates many academic and functional difficulties (e.g., unable to identify classroom objects, write her name, get dressed independently). Her special education teacher, Mrs. Baker, is concerned about her language and communication problems, specifically in the area of emergent literacy devel-

Every day Mrs. Baker conducts a morning circle. During this time, the children start the day off by singing songs and then work on functional literacy activities such as identifying the days of the week, month, and weather. In addition, toward the end of morning circle, Mrs. Baker presents the book of the week. She selects a storybook, creates several mini-lessons, and reads the book to her students every day for 1 week. When reading, Mrs. Baker models appropriate basic literacy skills (e.g., text pointing), has students identify pictures in the book, and asks several comprehension questions to gauge her students' understanding. Despite her best efforts to engage Alba during this activity, Alba is often off-task and fails to perform the basic literacy activities provided by Mrs. Baker (e.g., identifying pictures or vocabulary, answering simple comprehension questions). Concerned about Alba's progress, Mrs. Baker, with the help of the school's English as a second language (ESL) teacher, called Alba's parents to determine Alba's interests and find ways that Mrs. Baker could better assist her during literacy activities. Along with information provided by Alba's parents and with some help from the ESL teacher, Mrs. Baker began purchasing

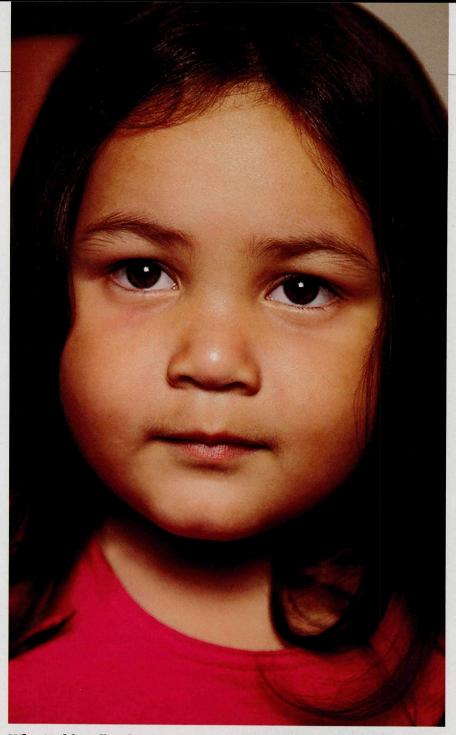
storybooks that were more relevant to Alba with hope of increasing her participation and being able to better teach target skills. Even with these small changes, Mrs. Baker felt there was still more that she could do to increase Alba's engagement and acquisition of emergent literacy skills during morning circle. What else should Mrs. Baker do?

Emergent Literacy Skills

If you have ever taught a young child like Alba, then you probably know exactly how Mrs. Baker feels. There can be several reasons why Alba may not be performing well during morning circle. For example, the difficulties Alba faces during literacy instruction may be due to her intellectual disability (ID), language barriers, perhaps the work is overwhelming, the activity may not be engaging (e.g., books may not be relevant), or it may be possible that Alba finds the act of reading and participating in literacy lessons aversive because of negative past experiences (e.g., children may have laughed at her when she made a mistake during reading). Whatever the case, one thing is certain-for Alba to eventually become a good reader, she must develop basic emergent literacy skills that can enhance later reading development. Emergent literacy skills act as vital precursors to later literacy development and include print awareness/concepts, alphabet knowledge, phonological awareness, language (receptive and expressive), and vocabulary development (National Early Literacy Panel, 2008). Although these skills are typically learned during early childhood years (Whitehurst & Lonigan, 1998), it is important to keep in mind that they are just as important for children like Alba who may have an ID and who may also be culturally and linguistically diverse (CLD).

What Can We Do?

Children with language impairments find themselves behind the curve when it comes to overall literacy development. Because of a lack of appropriate health care or supplemental services, disabilities that may impair language development, and maladaptive behaviors that may interfere with appropriate literacy opportunities and experiences (Browder & Spooner, 2006), children with disabilities face great difficulty acquiring emergent literacy skills (Downing, 2005). Add to these existing difficulties the complexities of being CLD (e.g., learning a second language), and you can imagine how much more demanding it must be for these students to learn these precursor skills. Children similar to Alba may face serious consequences (e.g., lasting reading difficulties, poor academic achievement, dropping out of school) if the appropriate actions are not taken to help curb these problems early on. The question that we then face is, "How can we change these outcomes for someone like Alba?" One answer to this question may lie in an updated version of the shared storybook intervention (see box, "What Are Shared Stories?") known as multimedia shared stories (MSS; Rivera, Spooner, Wood, & Hicks, 2013).



Why Multimedia Shared Stories?

Like traditional shared stories, the MSS is interactive and takes advantage of personal computers, software, and applications that have revolutionized the way we take in media content. The MSS provides the user with a more customizable experience. Stories are digitally based, created through computer applications or software (e.g., Story time for Kids, Teknowledge Software [2012]; Microsoft Power-Point), typically displayed on a screen, and can incorporate various kinds of media (e.g., pictures, videos, audio)

that can enhance the literacy experience while following the typical instructional format provided by traditional shared stories (e.g., Rivera et al., 2013).

Applications such as PowerPoint by Microsoft are perfect for creating an individualized MSS. Using PowerPoint to create digital stories is not a new idea; however, an MSS differs from other digital stories (e.g., e-books) because it is presented to children in the same way that traditional shared stories are (see box "What Are Shared Stories?") but with some added benefits. For example, an MSS can include

What Are Shared Stories?

Traditional shared stories are interactive instances when an adult reads a book with a child. The adult will pause several times during the read-aloud to interact with and engage the child. For example, during a shared story, an adult may pause to ask questions, introduce new vocabulary, discuss illustrations that are found within the book, and provide opportunities for the child to repeat or help read words or small sentences, assist in text pointing, or help turn pages while the book is being read. Because shared stories, by nature, are interactive, they become an excellent platform for teaching emergent literacy skills. Shared story experiences are meant to be engaging and enjoyable, providing children with a rich literacy experience (see Justice & Kaderavek, 2002).

various components (e.g., a student's primary language, music, photos) that can be used to target specific ways of enhancing emergent literacy development for elementary students who are CLD with an ID. Children like Alba may find reading aversive because of language barriers and difficulties surrounding the task. By creating an MSS we can increase the appeal of the story experience helping to engage students like Alba in the reading process. Furthermore, because an MSS includes multimedia content, it can increase motivation through additional interaction and potentially increase independence as a reader (e.g., Hetzroni & Schanin, 2002; Rivera et al., 2013). For example, multimedia content embedded within the MSS can be used to further explain vocabulary and/or concepts, providing multiple access points for learning new information. Through the use of visuals (multimedia content) and the incorporation of cultural artifacts (e.g., language, music) teachers can make stories and lessons more comprehensible and more culturally relevant, which is essential for all CLD students, thus making the MSS a beneficial platform to teach emergent literacy skills through several modalities. This article provides tips on how to create multimedia MSS using Power-Point slides, in addition to describing components and suggestions that can be used to tailor stories for elementary students who are CLD with an ID. Classroom implications are also provided.

Using PowerPoint to Create MSS

An advantage to using PowerPoint is that most teachers have the software preloaded on their own computer or those at school, providing a resource tool that has many lasting benefits. Creating an MSS can be done easily by using this software. It is not difficult to create PowerPoint slides, but it does require some familiarity with how to use the software. There is no need to worry if you have never used Power-Point. The resources listed in Table 1 provide tips and tutorials that demonstrate how to create slides and insert text, images, audio, video, transitions, and animations into your MSS.

Components to Consider for Students Who Are CLD and Have an ID

Once you are familiar with the process of creating slides using PowerPoint, you are capable of creating a storybook based on the individual needs of your student. When constructing an MSS (see Figure 1), it is important to consider the following:

- Identifying the target area of need for your student (e.g., difficulties with vocabulary, alphabet knowledge).
- Structuring the MSS (e.g., using themes, text, determining what images, audio, or video clips you may include).
- Being culturally responsive by incorporating the student's funds of knowledge (Moll, Amanti, Neff, &

González, 1992), and primary language (Cline & Necochea, 2003; Rivera, Wood, & Spooner, 2012) as a support tool within the story (Rivera et al., 2013).

Identifying and Selecting Areas of Need

When trying to determine areas of need, consider data taken from informal assessments (e.g., Reading Rockets, 2012), parent interviews, and even classroom-based assessments. Use data like these to determine which emergent literacy skills your student may be struggling with the most. Once a target problem—for example, difficulties with vocabulary, oral language, or print concepts—has been identified, begin to brainstorm a story that will emphasize the particular skills you may need to teach. Because Alba is having difficulty with text pointing, you may want to develop several instances within the story that will allow her multiple opportunities to text point. The same could be said about other aspects of emergent literacy. If Alba also had difficulty with the concept of word, an early phonemic skill that requires children to identify words as separate elements within text (Browder & Spooner, 2006), you could plan specific instances where Alba could recite a repeated story line (e.g., Spooner, Rivera, Browder, Baker, & Salas, 2009) to give her an opportunity to match her verbal utterances to the words she is identifying during the reading.

More Is Not Better

MSS, like traditional shared stories, are dynamic in the sense that they can be used to teach a variety of literacy and language skills. Keep in mind that it is not necessary to work on all skills that are identified as problematic for students (Beauchat, Blamey, & Walpole, 2009). Rather, teachers should select a few target skills and teach those in an explicit and systematic format. For example Spooner et al. (2009) taught emergent literacy skills to a kindergarten student with ID, similar to Alba, using a task analysis. The researchers broke down identified

Table 1. Web Sites on How to Create PowerPoint Slides

Task	Web Site
Creating your first presentation	http://office.microsoft.com/en-us/powerpoint-help/create-your-first-presentation-RZ001129842.aspx
Adding and deleting text boxes	http://office.microsoft.com/en-us/powerpoint-help/add-or-delete-a-text-box-HA010230259.aspx
Adding sound and video	http://office.microsoft.com/en-us/powerpoint-help/add-sound-and-video-to-a-powerpoint-presentation-HA001159312.aspx
Adding transitions between slides	http://office.microsoft.com/en-us/powerpoint-help/add-transitions-between-slides-HA010107771.aspx
Incorporating animations and transitions	http://office.microsoft.com/en-us/powerpoint-help/animations-and-transitions-RZ102809184.aspx
Starting a slide show presentation	http://office.microsoft.com/en-us/powerpoint-help/start-a-slide-show-presentation-HP005195347.aspx
Inserting a picture or clip art	http://office.microsoft.com/en-us/powerpoint-help/insert-a-picture-or-clip-art-HA010079409.aspx
Creating better presentations (12 tips)	http://www.microsoft.com/atwork/skills/presentations.aspx#fbid = KLBuzxeSodm

emergent literacy skills that were problematic and divided them into three manageable skill sets. Skill set 1 included pointing to the title of the story, pointing to the author, orienting, and opening the book. These skill sets were then taught throughout three shared storybook readings, allowing for the student to slowly build competence in the targeted areas.

Structuring the Story

Once you have identified and selected areas of need, the next step is to structure or plan out the MSS. Remember, a shared story reading is an engaging event and an MSS is no different. You must decide carefully how you will structure your story. Let us say that Alba was struggling with identifying articles of clothing (e.g., shoes, pants, socks). In this case, a teacher could create an MSS based on the theme of how to get dressed (e.g., Time to Get Dressed). This MSS could include instances where specific picture vocabulary (e.g., pants) appear that would be beneficial for Alba to learn, improv-

ing on her oral language and picture vocabulary skills. In this example, the teacher would read the book and stop at specific instances when the word or picture of pants appears and discuss with Alba how to correctly pronounce pants, perhaps define the word, pro-

Because the focus is on emergent literacy skills, for elementary learners who are CLD and have an ID, it may be good practice to create sentence structures that do not involve a lot of verbiage. Justice and Kaderavek (2002) suggest using stories that have five or

Creating themes for an MSS can help keep stories organized while providing students with a clear indication of what the book will be about.

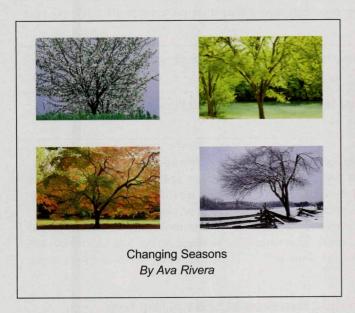
vide examples of how and how not to use the word in other sentences, all while pointing to or identifying the picture of pants within the story. By using examples or silly situations, the teacher can discuss with the student what is incorrect in her examples providing meaningful context for the student. Creating themes for an MSS can help keep stories organized while providing students with a clear indication of what the book will be about (e.g., Rivera et al., 2013).

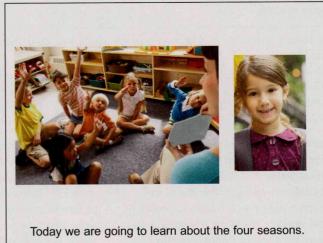
fewer words per page for young students with disabilities; however, this may vary somewhat depending on the ability of your student. For instance, when Silverman and Hines (2009) were selecting books for a read-aloud intervention, they selected books that were easy to comprehend for students but were still challenging enough to help students gain new knowledge. Justice and Kaderavek (2002) also suggested that stories should have features that are salient (e.g., large font

Figure 1. MSS Example











The first season I learned about was winter.



During winter it gets cold and snow sometimes falls from the sky.

that is easily discriminable for children). Because an MSS lends itself to being highly customizable, teachers can easily enlarge the font and highlight, underline, and even italicize target words or sentences.

Research has suggested that students with disabilities may not be as engaged during story book readings as their typically developing counterparts (Marvin & Mirenda, 1993). The use of technology and multimedia are engaging for students and have been identified as being beneficial when teaching literacy components such as vocabulary (National Reading Panel, 2000). An MSS can include transitions, photos, videos, and audio (see box "What Are Shared Stories?") that can essentially create an engaging instructional lesson, thus stimulating learning. Teachers may include photos of the student, his or her family, cultural artifacts, and items found in the community within the story to spike student interest. For example, take our story, Time to Get Dressed, created to help Alba identify articles of clothing. Mrs. Baker could include pictures of Alba's clothes and include them within her MSS. With assistance from the family, a video of Alba's closet or even an audio recording of her parents naming the articles of clothing can be embedded within the MSS. By incorporating various facets (i.e., pictures, videos, and audio), a meaningful personalized story for the student can be made, which has the potential to have a greater impact on learning vocabulary or other language skills. Moreover, using transitions and animations can add a bit of depth and character to the story making it a true multimedia experience.

Funds of Knowledge and Primary Language Support

For students who are CLD, it is important to incorporate their funds of knowledge and primary language within their educational experience (e.g., Rivera et al., 2012; Spooner et al., 2009). *Funds of knowledge* refers to, "historically accumulated and culturally developed bodies of knowledge and skills essential for household or

individual functioning and well being" (Moll et al., 1992, p. 133). The incorporation of primary language could be any instance in which the student's first language is embedded within instruction or academic content as a way to increase understanding or facilitate learning. When creating an MSS for students who are CLD with an ID consider creating a story that includes information or media content that reflects their culture or familiar aspects of their life outside of school (e.g., family photos, neighborhood stores, familiar songs or foods). Creating cultural contextual stories (stories that are culturally and accurately relevant to a particular student) is a great way to honor student diversity and can contribute to increased language and literacy achievement (Cline & Necochea, 2003; Spooner et al., 2009). In addition, teachers should consider using web sites (e.g., translate.google.com, babelfish.com, bing.com/translator) and parents to help translate directions, vocabulary, or other simple sentences into the student's language. Web sites such as Google Translate allow you to type in a word or sentence in English, translate it into another language (e.g., Spanish), and audibly recite the second language translation, which can allow monolingual teachers to practice saying words or phrases in a second language. Small steps such as these have been suggested to reduce student stress, increase comprehension, and aid in the overall learning process of CLD students (Cline & Necochea, 2003).

Tips for Teacher Instructional Behaviors

Once a story is created, it is time to teach. During a shared story experience the teacher plays the role of facilitator. All directions provided to students should be explicit and direct (see Justice & Kaderavek, 2004). If you want students to explore the story, then encourage them to flip through the digital pages using the computer keyboard or mouse. If students stop to ask questions, take the opportunity to investigate the question and feel free to incorporate the student's or your

own personal experiences outside of the story to help explain the concepts. Remember to pause throughout the MSS to encourage discussion about key concepts that you may be trying to teach (e.g., vocabulary, print awareness, text pointing, concept of word). Most important, ask questions that can ensure active student participation and help you gauge student understanding. Some sample questions to ask during a MSS are: (a) How do we start our story?, (b) Where do I start reading?, (c) What word is this?, (d) What is this a picture of?, (e), Can you help me point to the words as we read?, (f) How do we keep our story going (turning the page)?, (g) Can you find the letter C in this sentence?, and (h) What was our story about?

Implications for Practice: Putting it Together

With the many pressures that educators face today and the complexity of working with students who are CLD with special needs it is easy to see why a teacher like Mrs. Baker would be so concerned for Alba, especially at such a crucial age. An MSS is not meant to replace curriculums, but because of their adaptability, they can be used to meet the varying needs of students like Alba, making them a powerful literacy supplement. In Alba's case, Mrs. Baker can collaborate with Alba's parents and use Internet resources to create an MSS to use during circle/literacy times. Through the use of technology and references to Alba's funds of knowledge, reading time can be a fun, engaging event. If reading is fun and Alba understands what is being asked of her (using her primary language), it may become less aversive, erratic behaviors may cease, and the potential to learn emergent literacy skills and participate meaningfully in circle time can improve over time.

Research has demonstrated how traditional shared stories can be used for multiple purposes and students (e.g., Rivera et al., 2013; Silverman & Hines, 2009; Spooner et al., 2009). An MSS is no different, and teachers like Mrs. Baker can take advantage of this. As mentioned earlier, due to the nature of



PowerPoint, slides are highly customizable allowing the user to highlight; place words in bold font; and use animations, pictures, videos, audio, and transitions. Another benefit of MSS is its easy storage (e.g., portable USB drive). Because an MSS is a digital file, teachers can save, import, and revise it when necessary at their convenience. Most computers in schools have PowerPoint preinstalled, making the use of it cost efficient, placing less financial strain on teachers and school districts. An MSS is an excellent way to incorporate universal design principles. Although an MSS can be used for oneon-one instructional settings, with the use of a SMART Board, it can be instantly transformed into a literacy activity for the whole class, which can be used as a way to promote and introduce different cultures, like Alba's, to the entire classroom. Finally, because of its flexibility, an MSS can be designed to include a student's culture (e.g., funds of knowledge, primary language), which, in turn, increases engagement and comprehension and has a positive effect on emergent literacy development.

example, during morning circle Mrs. Baker would sometimes bring her laptop out and present the story. Other times she would connect her laptop to

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Conclusion

Mrs. Baker took the right steps toward improving Alba's emergent literacy skills but sometimes struggled when purchasing or trying to adapt books for lessons. By using an MSS, she was able to create stories that fit Alba's needs. Adapting books (e.g., inserting specific picture vocabulary, primary language) became easier, and Mrs. Baker did not have to drastically change her instructional routine. For

a projector and continue the lesson with the instructional tips provided earlier. Over time, with the use of an MSS and systematic instruction, Alba's skills began to improve and her classmates also benefited from the lessons. Through the process Mrs. Baker learned more about Alba, her parents, and their culture.

An MSS incorporates the same components that make traditional shared stories successful while keeping up

with rapidly changing technology (e.g., Rivera et al., 2013). Teachers or classroom paraprofessionals with computer access and basic computer skills can create engaging stories that promote cultural relevance for students who are CLD with ID. Through the use of systematic and explicit instruction (Justice & Kaderavek, 2004; Spooner et al., 2009) that is combined with multiple examples and opportunities to respond, students like Alba can better learn critical emergent literacy skills. Providing an MSS to students who are CLD with an ID is within reach of classroom teachers everywhere with no need for expensive curricula. All you need is a computer, collaboration with parents or other school personnel, and some imagination.

References

- Beauchat, K. A., Blamey, K. L., & Walpole, S. (2009). Building preschool children's language and literacy one storybook at a time. *The Reading Teacher*, *63*, 26–39.
- Browder, D. M., & Spooner, F. (2006).

 Teaching language arts, math, & science to students with significant cognitive disabilities. Baltimore, MD: Paul H. Brookes.
- Cline, Z., & Necochea, J. (2003). Specially designed academic instruction in English (SDAIE): More than just good instruction. *Multicultural Perspectives*, 5(1), 18–24.
- Downing, J. (2005). Teaching literacy to students with significant disabilities:

 Strategies for the K–12 inclusive classroom. Thousand Oaks, CA: Corwin Press.
- Hetzroni, O. E., & Schanin, M (2002). Emergent literacy in children with severe disabilities using interactive multimedia stories. *Journal of Developmental and Physical Disabilities*, 14(2), 173–190.
- Justice, L. M., & Kaderavek, J. (2002). Using shared storybook reading to promote emergent literacy. *TEACHING Exceptional Children*, 34(4), 8–13.
- Justice, L. M., & Kaderavek, J. N. (2004). Embedded-explicit emergent literacy intervention 1: Background and description of approach. *Language, Speech, and Hearing Services in Schools*, 35, 201–211.
- Marvin, C., & Mirenda, P. (1993). Home literacy experiences of preschoolers enrolled in Head Start and special education programs. *Journal of Early Intervention*, *17*, 351–367.
- Moll, L. C., Amanti, C., Neff, D., & González, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*, 31, 132–141.
- National Early Literacy Panel. (2008).

 Developing early literacy: Report of the

- National Early Literacy Panel. Washington, DC: National Institute for Literacy. Retrieved from http://lincs.ed.gov/publications/pdf/NELPSummary.pdf
- National Reading Panel. (2000). Report of the National Reading Panel: Teaching students to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups. Bethesda, MD: National Institute of Child Health and Human Development, National Institutes of Health.
- Reading Rockets. (2012). *Informal Reading Assessments: Examples*. Retrieved from http://www.readingrockets.org/article /3411/
- Rivera, C. J., Spooner, F., Wood, C. L., & Hicks, S. C. (2013). *Teaching vocabulary to English language learners using multimedia shared stories*. Manuscript submitted for publication.
- Rivera, C. J., Wood, C. L., & Spooner, F. (2012). Comparative effects of Spanish and English vocabulary instruction for English language learners with moderate intellectual disability. *Multiple Voices for Ethnically Diverse Exceptional Learners*, 13, 42–55.
- Silverman, R., & Hines, S. (2009). The effects of multimedia-enhanced instruc-

- tion on the vocabulary of English-language learners and non-English-language learners in pre-kindergarten through second grade. *Journal of Educational Psychology*, 2, 305–314.
- Spooner, F., Rivera, C. J., Browder, D. M., Baker, J. N., & Salas, S. (2009). Teaching emergent literacy skills using culturally contextual story-based lessons. *Research* and Practice for Persons with Severe Disabilities, 34, 102–112.
- Teknowledge Software. (2012). Story time for Kids [computer software]. https://itunes.apple.com/us/app/story-time-for-kids/id410788584?mt = 8
- Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 69, 848–872.

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