

# Literacy “App”lications: Preservice Teachers’ Explorations of the Role of Technology in Literacy Instruction

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## Abstract

*One noticeable commonality among sessions at the 2013 TALE Literacy Summit was the emphasis on technology – from using e-readers as part of guided reading instruction to iPad apps to support students’ retelling of stories to the use of a variety of apps and mobile technology as part of literacy instruction. The emphasis on technology encouraged us to rethink the ways in which we prepare our preservice teacher candidates to effectively use apps, e-readers, and other technology in their future classrooms.*

Particular sessions from the TALE Literacy Summit that inspired our exploration are as follows: *Guided Reading for the 21<sup>st</sup> Century Learner*, presented by Deanna Long; *I-Pad Apps That You Can Use in Your Classroom With Your Students for Centers or Other Educational Purposes (K-5<sup>th</sup>)*, presented by Christy Dreka; *“App” Happy: Integrating Apps and Mobile Technology Into Literacy Education*, presented by Amy Andersen; *Roadrunner Press: Our Digital Publishing Journey*, presented by Mary Higdon and Laura Lee McQueeney; and, *E-Readers: Junior High Student Usage Patterns and Comprehension of Fiction Texts*, presented by Diana Sarao.

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As faculty in an elementary education teacher preparation program, we not only teach courses specific to literacy but also supervise students in field-based placements within which they teach small-group (Field Experience I) and whole-group lessons (Field Experience II). As part of the Field Experience II course, preservice teacher candidates are expected to use technology in their lessons. Such technology use generally involves projecting a data sheet via a document camera during a mini-lesson or showing completed student work via the document camera during seminar. The use of PowerPoints to pre-teach vocabulary is also common. In Field Experience I, preservice teachers are more limited in their access to technology during small-group guided reading instruction, which often takes place outside of

the classroom. After attending the 2013 TALE Literacy Summit, we reflected on ways to better prepare our teacher candidates to use technology in their own teaching.

While technology use is on the rise with today's K-12 students (Kaiser Family Foundation, 2010), preservice teachers may struggle to implement technology in the classroom (Bozdoğan & Özen, 2014; Çelik & Yeşilyurt, 2013; Ertmer & Ottenbreit-Leftwich, 2010; Goktas & Demirel, 2012). By promoting a “digital learning culture” (Søby, 2008, p. 138) within the classroom, preservice and in-service teachers can support students' learning through the use of technology. One session at the TALE conference focused on the use of e-readers during guided reading instruction, and this led us to consider the ways in which our preservice teachers provide small group instruction and to reflect upon the ways we can use technology as part of that instruction. While Field Experience II undergraduate students do not specifically teach guided reading as part of their field-based experience, they do confer with students and engage in independent and partner reading during the mentor-led reading workshop time. In past semesters, teacher candidates visited the campus library to check out the same titles K-5 students in their placement were reading. While many preservice teacher candidates own e-reader devices, the use of technology while in their K-5 classroom has been prohibited. After attending the 2013 TALE Literacy Summit, I (Carolyn) revised the Field Experience II electronic device policy to allow teacher candidates to read on their e-readers as part of reading workshop. This semester, several K-5 students have been bringing personal devices (e.g., Kindle, Nook, etc.) to school to use for reading workshop; now my undergraduate students also have that option. Teacher candidates are able to partner more easily with students for paired reading by accessing titles on their own e-readers, too.

Several TALE sessions focused on the use of apps in literacy education. I (Robin) have been able to bring apps into one of the content courses that students take concurrently with Field Experience I. This course focuses on oral language development, and I have had great success using iPad minis in my classroom to have preservice teacher candidates not only explore educational apps but also evaluate those apps in terms of their content base. Each app was chosen based on reviews from other educators and/or

its label in an internet search as an app that would increase oral language development through vocabulary, story retell, and listening and speaking activities. During multiple class periods the preservice teacher candidates interacted with the apps and evaluated them based on the knowledge of oral language development and strong pedagogical practices they had previously studied. The specific categories for evaluation that I chose were: the connections to the curriculum (which in my course was oral language development), vocabulary, and retelling of stories; the format of the app whether problem based or rote practice; differentiation for meeting students' needs and the ability to change levels; feedback of results and student performance both for the student and the teacher to view; and user friendliness for understanding instructions and independent use by students. The teacher candidates also evaluated each according to the levels of Bloom's taxonomy addressed by its content.

One app evaluated was *Describe it to Me* (<http://smartyearsapps.com/service/describe/>) developed by Smarty Ears. The content addressed in this app was vocabulary development. The students agreed that this app was fun, visually appealing, and simple for a child to use independently. One student said, "It gives the students an opportunity to apply prior knowledge to real life situations in game form." Another recommended the app because it addressed multiple Bloom's levels. Teacher candidates thought the app *Sock Puppets* (<http://my.smithmicro.com/mobile/sockpuppets/index.html>) by Mike Clifton and Associates had content most closely related to the course because it addresses story retell through vocabulary, the recording of sound, and artistic expression. One student said, "This app is perfect for elementary age children learning to retell. They would have a blast with retelling their stories and then seeing the socks speak in funny voices using the words they wrote." They also noted that stories could be saved and viewed later for assessment by the teacher. As a part of their field experience, the preservice teacher candidates used the highest rated apps during small group instruction and assessment time with their k-2 students. For teachers interested in utilizing apps in their classroom, an internet search for the phrase "free educational apps" will generate a starting list with user reviews.

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By evaluating educational apps before using them during their field experiences, teacher candidates realized that not all apps perform as advertised. They had to critically analyze the content of the app and make decisions on whether the app would help reinforce the content they wanted taught in an engaging way. The teacher candidates also learned that there are free and low-cost apps that can be valuable in helping students learn. My students were awakened to the fact that just because something is labeled an “educational” app or is advertised to teach a specific skill, that is not always the case; teachers must evaluate carefully the benefits of using this technology in their classrooms and never assume.

Through the use of technology in our content courses and through supporting the use of technology for authentic purposes in our students’ field experiences, we have been able to practice what we preach -- rather than *telling* our preservice teacher candidates that technology can be used for literacy instruction, we are *showing* our students how to do so and are giving them hands-on opportunities to use technology. As we prepare our preservice teachers to teach K-12 students in the 21<sup>st</sup> century, we must model ways to incorporate technology into instruction. Previous research (e.g., Smith & Greene, 2013) has demonstrated the importance of providing opportunities for preservice teachers to use technology as part of a field-based practicum experience, and we were motivated to encourage such technology use with our own students. The 2013 TALE Literacy Summit provided us with a jump-start for considering ways to promote authentic, effective uses of technology as part of literacy instruction.

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