Shape Shifters: Using “New Literacies” to Re-Shape Teacher Education

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Reading and researching have become non-linear processes as students come to class comfortable and fluent at using technologies. This paper discusses some of the ways in which a team of teacher educators is responding to the challenges of new literacies in their classrooms and across their programs. A specific focus of this study was for each panelist to share a glimpse of her or his own practices, while building toward the programmatic changes necessary to provide pre-service teachers and graduate students with multiple ways to understand and apply new literacies in their professional work.

Technology has changed the face of education in ways we are only beginning to realize. Teachers will need to learn new ways to think about readers’ needs and new instructional strategies to meet those needs. Readers today find that information is readily available in vast quantities; they need strategies to sort through layers of text to find needed information. Readers use a reading process that is no longer linear; they must know how to navigate the web while scanning and skimming to find and synthesize ideas. Knowing how to organize information takes on new urgency as readers gather information from multiple sources. Strategies to evaluate text
for accuracy, bias, and importance are crucial for all readers to develop. The concept of literacy is stretched in ways that raise new questions for teachers and teacher educators (Hunt, 2000) as technology brings possibilities and challenges of new literacies to classrooms.

Many students navigate the internet daily and come to class comfortable and adept at using technologies. State curriculum mandates set high expectations for the use of technologies in the K-12 system, yet teachers often have limited access and/or understanding of these new technologies and what they can offer for teaching and learning (Albon & Trinidad, 2002; Putnam & Burko, 2000). Graduate students in teacher education programs increasingly avoid spending evenings and weekends on campus in favor of online courses that provide flexibility in when and how one studies and demonstrates learning.

Technology has increased the ways in which students can share their ideas with authentic audiences, learn collaboratively with peers, and learn from multiple resources. The pace at which collaboration and multiple perspectives on an issue or topic can be introduced and demonstrated (Mott & Klomes, 2001; Ripley, 2002) has greatly accelerated. The constantly changing possibilities of technology demand that teacher educators, many of whom did not learn in these new ways during their education, reshape and redefine their work with pre-service and inservice teachers at a speed that sometimes leaves heads spinning. The shape of education is shifting.

Technology and new literacies are a part of everyday life as the internet connects people across the world and as it changes how we find information, purchase goods, and learn in schools. Yet how have new literacies and technologies changed the work of teacher educators and their students? How have new literacies and technologies changed the teacher education programs that prepare future teachers and provide professional development to current teachers? These questions framed the study that resulted in this panel presentation at the American Reading Forum Conference in 2008.

Six teacher educators at a small, regional state university began asking these questions of themselves and their colleagues. This group of six comprised nearly forty percent of the faculty in the School of Education at this university and included courses at various stages and across subject areas in the programs. Each of the teacher educators was tinkering with technology and new literacies in his/her own classes. Because the group represented such a significant portion of the entire faculty, they agreed their work offered an important look at what was changing within the programs in the department. Therefore, these teacher educators designed a year-long study of their individual practices in using new literacies with their teacher candidates. For the purposes of the study, the definition of new literacies was defined as 1) technological media (e.g., the Internet), 2) a genre (e.g., wiki-books and wiki-pages), and as 3) a skill (e.g., reading online text). Throughout the year, they discussed, compared, and reflected on how each of the individual pieces influenced the experiences their teacher education students were having with new literacies across the program. Each panelist narrowed his/her focus to one representative practice with new literacies for the purposes of this study and 2008 American Reading Forum Conference panel presentation. This paper presents a summary of the presentation and the findings of the panel from this study as well as sharing some future goals that resulted from the reflection on the panel presentation.

Summary of Panel Presentation

This panel session was framed around the challenges of teacher education in light of new literacy needs, habits, and demands of students in the information age. In addition to the changes
in student characteristics, there have been changes in the literacy demands both on the teachers and the students whom they teach. Leu, Leu, and Coiro (2004) suggest that instruction in new literacies for K-12 students must include “1) identifying important questions, 2) navigating information networks to locate relevant information, 3) critically evaluating information, 4) synthesizing information, and 5) communication of the solutions to others” (p. 21). Such characteristics of learning were already the foundation for learning in quality teacher education programs; however, technology changes have made it possible to expand the opportunities students have to perform them (Bomer, 2008).

A short movie based on one aspect of each panelist’s use of new literacies was prepared before the conference (ARF 2008 Panel Presentation). The video was used to set the tone of the presentation in multiple ways. First, the panel was “hidden” in the audience so that the attendees did not see the panelists in the beginning of the presentation. The intent was to simulate one way new literacies occurred within the study when learning occurs without the influence of face-to-face contact between teacher and learner and/or among learners. Second, the movie provided a glimpse of the various ways each of the six panelists was using new literacies within his/her individual courses. Each panelist chose one practice to illustrate in the movie and the discussion that followed the movie was structured into small groups, each group based on one practice and led by that panelist. Third, the video modeled the non-linear aspect of new literacies by leaving the meaning open to interpretation, and asking the reader or viewer to gather, integrate, and synthesize ideas based on the title, the presentation summary from the conference program, and his/her own background experiences. Last, the movie illustrated the difficulties that technology-based teaching and learning present such as poor visual and/or audio presentations and equipment or software difficulties. Following the video the panelists revealed themselves and each gave a brief introduction to the topic within his/her small group. Participants chose a small group discussion that was of interest to them.

The panelists’ individual projects in order of presentation in the movie were (a) using new literacies to engage students in authentic research, debate, organization, synthesis, and sharing of relevant information and concepts on educational issues within a foundations course; (b) using new literacies to create, reflect on, and share a video of an Academic Service Learning Project in which teacher education students led a schoolwide family read-in at a local elementary school; (c) offering teacher education students ways to document their professional experiences in an electronic teaching portfolio that included multimedia projects they created in methods courses; (d) considering the multiple ways the work life of teacher educators has changed as a result of teaching online rather than face-to-face courses; (e) having students use technologies such as videos and wiki-spaces to create and film case studies to be used for discussion of course concepts within special education courses; and (f) using new literacies to research local history topics through use of primary source documents and to record teaching events based on the research.

After the small group discussions ended, each panelist synthesized issues from her or his group for the broader audience. During this time several themes of using new literacies in teacher education were highlighted and consistent with the research literature, especially in three areas. First, panelists made connections to the quality of their work lives (Leu & Kinser, 2000). The work lives of teacher educators are changing in both positive and challenging ways that require constant learning and shifting of paradigms. For example, parameters of time, opportunities for feedback to and from students, information sharing between teacher and students and among students, student motivation and responsibility, and structures for
collaborative learning require revisiting and rethinking our work as new literacies become integral to learning in our courses.

Second, panelists made connections to the theme of navigating information (Bomer, 2008; Leu, Leu, & Coiro, 2004; Minkel, 2003; Snyder, 1999). New literacies expand opportunities for research and sharing information as learning becomes generative rather than reproductive. Teaching students ways to manage the wealth of information, focus on their questions and assignments, and organize what needs to be shared is critical to their success as they use new literacies to deepen their understandings of course concepts.

Finally, panelists made connections to the theme of communication with new literacies (Leu & Kinser, 2000; Leu, Leu, & Coiro, 2004). Technology offers strong opportunities for professors and students to document their learning and their work as they create movies, videos, wiki-spaces, graphic organizers, and programs. The immediate questions and feedback from the participants in the presentation was supportive, positive, and reflective of the theoretical framework used to organize the study. The panelists left the presentation with new questions, new perspectives on their individual and collective work, and new ideas to explore when they returned from the conference. Each panelist composed a brief reflection on the panel presentation and how it added to his/her own thinking about the uses of new literacies in teacher education which are shared below in this paper.

Panelists’ Session Reflections

Following the conference, the panelists discussed their individual sessions and the collective learning of the group. Each of the panelists composed a brief reflection or take away that captured their experiences, questions, and learning throughout the course of the study, the preparation and planning for the ARF 2008 Conference, and in the small group sessions and the whole group synthesis as a part of the 2008 conference. As the reader will begin to understand from the following reflections, each panelist left the conference with new questions to pursue as we seek to better understand the power of new literacies in courses and programs for teacher educators.

Changing Contexts of Teaching and Learning (Suzanne)

I have been teaching graduate reading courses online for five years now. I entered the world of online teaching with much skepticism. I consider myself to be an interactive, engaging teacher, something confirmed in all my courses, undergraduate and graduate, through high student and peer evaluations. To me, something almost magical occurs in a classroom when learning is happening, students are engaged, and the instructor shares in the learning and the teaching. Could I replicate, and even improve, this “magic” in an online course? I doubted it.

I have been surprised in multiple ways. First, the context of my work changed dramatically. I found that I had no boundaries on my time due to the pressures to be available to students who study at their convenience, often late at night. I found myself teaching at 5:00 a.m. and at midnight. Putting personal boundaries on my time was a struggle. Second, the time involved in online learning was more demanding than I expected. Before a course began, I not only needed to have the syllabus, assignments, rubrics, and study groups organized, but I had to upload all of these on WebCT before day one of the course. Many students wanted to look over the whole class and the due dates before they began; they needed to “see” the whole course to
plan their own time. As the students worked through assignments, I had people asking for help with Module One and Module Five at the same time. It seemed as though I was sometimes a personal tutor for each student in the course. Obviously, “classroom” management became an issue for me to relearn in this new type of classroom; I sometimes felt like a beginning teacher despite my nearly 40 years as an educator.

Beyond these management issues, I struggled with where I fit into the course. Students worked with a small group of colleagues to discuss and study the readings. They had side conversations with each other about topics of interest that arose across the course. They questioned and gave feedback to each other. I was thrilled; small learning communities had formed within the class. But, I sometimes felt like the hostess who throws a party and spends the whole evening in the kitchen. I read and added my thoughts to group and individual postings and assignments, but I was not sure how important my voice was in the course. I continue to struggle with ways to offer the expertise I have acquired from forty years as an educator as well as my years of education and study. I am able to “listen” to student conversations and to synthesize and expand important points with postings of my own. Yet, I seldom know if the students return to that thread to read and contemplate my insertions. However, this uncertainty is not so different from face-to-face teaching in that we never truly know what students take away from what we present.

Cultural Shifts Change the Norms (Derek)

I simply had not realized the extent to which technology is embedded in the culture of our university. Though my colleagues and I met several times to work on our presentation for the 2008 ARF conference, it wasn’t until I watched our presentation that my pride swelled. What’s more, it wasn’t until our discussion with the audience that I realized our university’s pervasive technology usage is rather unique. For us, it is “just what we do.”

Schein (2004) suggested that culture binds people together; shapes their behavior through routines, rules, and norms; provides meaning; and helps them to solve their problems. Or simply, “culture is the ways things get done around here” (Deal & Kennedy, 1982, p. 501). Often culture is tacit and unrecognized. Such was the case for technology at our university.

Having worked at only one university – one in which all students are given laptops on a campus with high-speed wireless internet reception throughout – I assumed we were just like any other university. I thought all teacher candidates used Flipcams to record and post fieldwork with K-12 students. I thought all teacher candidates embedded new literacy tools like wikis, blogs, and video clips into their lesson plans. Like the kid who realizes his family eats a dish named or created different from those of his peers, I learned that our use of technology was different from others in our audience.

It is important to note that I am not suggesting we are any better than universities without ubiquitous technology usage, just different. Each university has unique characteristics that help to define its values and provide a framework for improvement. Our university’s new literacies culture binds us together, gives us identity, and helps us to socialize new members. For me, it took our ARF presentation to realize this.
Lack of Infrastructure in the Local Schools (Sue)

As technology evolves and new forms of literacy unfold I find it hard to keep abreast of the latest way to present or access information. Not so for my students, who often are my teachers when working with new technologies. While planning for the panel, I flashed back to seven years ago when I was just learning (with the help of my students) how to make the simplest of PowerPoints, to today where my students and I are displaying work on wiki-spaces. While I prepared for our presentation on new literacies, I could not help but observe the dust covered relics in the far corners of university classrooms. The little used overhead projector. I’m just waiting for the day when a student casually asks, “What is this used for?” while curiously observing the overhead.

The reality of embracing of new literacies at our university was affirmed when we arranged our fall semester to end with a four day field experience. Students were teaching in the local middle school and were faced with a few challenges, including their first experience working with seventh graders. The other challenge was no access to wireless networks or data projectors which made use of their laptops very limited. With computers being such an integral part of our laptop university’s lifestyle, I watched my students experience a sort of withdrawal. Consequently, they were left with no choice for whole class presentations but the antiquated (in their eyes) overhead projector. I secretly smiled as I watched their inexperience with the overhead, fumbling with the controls trying desperately to adjust the distance and clarity. Using the overhead for my students was like asking me to go back to that old manual typewriter and use white out for my errors.

Choices and Change (Joe)

The creation of the video through Windows Movie Maker elicited an uneasy level of satisfaction as we moved closer to the presentation. I began to question the video’s ability to capture the richness of the discussion to be based on semesters of work completed in six different graduate and undergraduate courses. I selfishly wondered if the audience would understand the tens of hours we put into editing the video so it was at a manageable length while still working to capture the themes of our panel discussion. I felt like the student who starts to ask how long the paper has to be to satisfy the instructor, or in this case the audience.

I was intrigued by the frequency of logistical questions pertaining to the development of our video piece of the presentation. In the breakout group I led, audience members were curious as to the amount of time the presentation took to develop. The audience members put the question of “video production” time up against the time lost for planning and reflection on our teaching and wondered if this is the same problem a student encounters as we ask them to use digital literacies to demonstrate their learning. I was able to respond to this question as it was foremost in my mind when co-developing assignments using digital technologies with teacher candidates for their K-12 students. Inherent in our planning has been the focus on content first. To achieve this focus I shared our use of old technologies such as paper/pencil, discussion models, use of chart paper, and teacher written and verbal critique of student work. All these techniques have been built into the lesson plan prior to the introduction of any digital literacy application. The panelists did the same to develop the American Reading Forum presentation for the 2008 conference.

I left the panel discussion with the notion that in order to use digital technologies well, I
had to attach it to something I already knew as familiar such as the writing process supported by my work with the National Writing Project. I couldn’t help but wonder how my need to understand and control the reading and writing environment for my teacher candidates might be inhibiting or enhancing their ability to demonstrate their own learning through the use of digital technologies. Should I be so insistent on a process that takes away or hides the use of “new literacies” until I deem the time right for its use, or should I allow more choice on the front end for candidates and students to create, draft, and explore new literacies?

**Accountability (Laura)**

My personal goal was to get my students to be responsible for their learning by sharing their work on our wiki, making them accountable to one another as well as to me. The wiki also served as a place for others to turn for information once the course was over. In another class, students created a video for their group presentation, allowing them to embed examples that would have been impossible to share any other way. Surprisingly, I found that some students were engaged by simply using “new literacies” and for others, the goal was to complete the assignment and cross it off the syllabus. Perhaps the question should not be how we can use “new literacies” in our teaching; rather what do we have to do to help students want to engage in the content we are teaching. The question I continue to struggle with is what tools or framework can we provide the learner to encourage them to make connections between the content, their own learning, and their future. How can we encourage learners to revisit ideas and concepts over time?

**Deep Learning (KC)**

The session panelists and audience collectively decided that the electronic concept mapping was an actual literacy that my students learned and used to communicate with and about. The students’ creation of concept maps was similar to creating web environments and the technology was simply a tool to enhance the discussion of the controversial issue.

Although I have yet to collect empirical evidence, I do believe that the use of the concept maps increased my students’ engagement with educational psychology content. Further, the maps allowed for more descriptive debates where students even enhanced their ability to debate by including extra resources and websites within their electronic maps. Students seemed to jump back and forth between the auditory debate and the visual presentation of their own maps.

**Panelists’ Connections to Sessions Attended**

As the panel debriefed following the conference to consider future goals for our work and in preparation for completing this paper, we saw immediate connections to our panel presentation and our own learning from other conference sessions we attended. We have not tried to make one-to-one connections with other sessions, but have tried to capture the gestalt of our learning in individual reflections. Based on the presentations from our colleagues at the 2008 ARF Conference we noted considerations we must make as we continue to develop learning in a high-tech environment and to explore how new literacies can be integral to teaching and learning in our work as teacher educators:
I learned a great deal about new literacies, particularly text on the internet. In addition to the foundational literacy skills, teachers need to get students to critically evaluate the information, synthesize a variety of information, and communicate the new information to others in various ways. (Derek)

The session that made the most impact on my thinking was titled, “At the Movies: Views of Reading in Contemporary Film” presented by Michael French, Lourdes College and Jennifer Fong, University of Michigan. The researchers used an open-ended question of “How is reading portrayed in contemporary film?” and then showed short video clips to document positive and negative cases of reading. Examples included the actors engaging with text as well as struggling readers. What really opened my thinking was how subtle a simple thing like how reading is portrayed in mass media can (and does) impact the general population. It almost is a form of manipulation or propaganda in that the “right actor / actress” can really “present” a “mission” to the general audience member. In short, reflecting on my experience, I’d say that the most important learning was for me to remember how powerful communication is. (KC)

Based on the reactions to all of the conference sessions I learned that although technology seems to permeate our universities, we are still infants when it comes to tapping into its abilities. (Joe)

I came to see that even though teacher educators are eager to know more about new literacies in the schools, we are still infants in our understandings of how our work is changing and must change to meet the needs of the future generations. We have learned so much; we have so much to learn. (Suzanne)

I've started thinking about the different ways that boys learn to read and we need to honor the unique needs of boys. It's also made me think about the number of boys in special education and how we can choose materials and assignments differently. I will be incorporating this into my methods for emotional impairment class this semester. I'm also reflecting on how to help students use the web differently as there is more information than they can consume. How do we help them identify "quality resources" rather than taking the first thing they come across? (Laura)

I learned more about the benefits of online education: more cost effective than a face-to-face; 2) accessibility (24 hours a day, 7 days a week); greater motivation for students learning though multimedia experiences; and ability to reach new audiences. I also learned from our presentation that our university is at the forefront when it comes to technology use for teaching and learning. (Sue)

In summary, both our presentation and the others we attended at the conference left us feeling affirmed about the changes we have made and challenged by the changes we have yet to make. We each found new questions and set new goals for our individual learning and our collective study. We left the conference feeling that we have laid the
foundations for program improvement through the use of new literacies and with a thirst to learn and explore more ways in which these literacies can improve our teaching and learning across the program. We left with the desire to move our learning forward and to answer our self-imposed questions.

Educational Significance

New literacies based on increasingly complex uses of technology will be a part of the world our teacher candidates must negotiate. Teacher education must programs prepare candidates who can consider, apply, and evaluate changes in literacy and technology on a daily basis as they teach their students the skills needed for life in a constantly changing global society (Holley & Haynes, 2003; Otero et al., 2005; Wepner et al., 2003, 2006). This panel presented some possibilities for changing and embracing the new literacies in teacher education courses and programs while being mindful of the rationale for and challenges of such changes. The research of the panelists and the input of the participants enabled this group of teacher educators to consider the power of using new literacies in teacher education and affirmed their commitment to do so.

The panel’s post-conference debriefing showed an ongoing need for the teacher educators in our program to continue with structured purposeful reflection and modeling as it relates to the use of technology. Reflecting back to the theoretical frame laid out for the study it was clear to the panel that the possibilities for utilizing new literacies in our teaching are endless. However, our discomfort or anxiety with new literacies is still high when discussing how to best navigate networks to locate information, to create digital pieces that are of high quality in pedagogical content and methods (Leu, Leu, & Coiro, 2004), and to keep up with the ever changing possibilities new literacies bring (Minkel, 2003) as we enroll candidates in our program with an assumed inherent understanding of this medium.

The panel rationalized that the processes used to identify questions and to evaluate and synthesize information that have been incorporated into their everyday teaching since they began their careers remained high and was not greatly impacted through the use of new literacies. The panelists believe that technology neither enhanced nor took away from our ability to model quality questioning or synthesizing of information.

Of greatest significance to the panel was the realization that we cannot keep up with the “things” that are new literacies (Leu & Kisner, 2000). Hardware and software advancements will most likely make some of the technology new to us and used throughout our study and presentation obsolete by the time this article is published. It was evident to the panel that our discussion with program faculty and the content of our courses focus on the opportunities and processes for using and learning technology (Bomer, 2008) to allow teacher candidates rehearsal in the technological skills and dispositions necessary to develop their own teaching and learning throughout their careers.

Conclusion

The research study, panel presentation, and resulting paper led the group of six teacher educators involved in the study to some conclusions that enabled them to set future goals. The group found that their work as teacher educators had changed immensely as they individually and collectively embedded new literacies into their courses and across the program. However,
like the Native American “shape shifters” of legend, the shape is merely the outward manifestation of the heart. The heart of the panelists’ teaching and their students’ learning remained intact. We continue striving to develop readers who construct meaning in deep ways by synthesizing their experiences and ideas with ideas from peers and texts of all types. Our focus has remained on teaching students to use their knowledge to create new learning for themselves and the P – 12 students they will teach. We still provide authentic, reflective opportunities for students to examine teaching and learning from multiple perspectives.

As the shapes of our work and our students’ needs shift, we must learn new and better ways to make new literacies integral to all we do. We continue developing new habits for ourselves and our students. We seek better procedures and assignments that enable students to apply the new literacies in their own learning and in their teaching. The shapes shift. The goals remain the same.
References


