

Using Text Messaging to Summarize Text

Angela Ruffin Williams: Alabama A&M University

Summarizing is an academic task that students are expected to have mastered by the time they enter college. However, experience has revealed quite the contrary. Summarization is often difficult to master as well as teach, but instructors in higher education can benefit greatly from the rapid advancement in mobile wireless technology devices, by using these devices to teach summarization. Furthermore, college students today are of the iGeneration. An overwhelming number of them own and use a mobile wireless device for texting and other communication means. This paper describes how an instructor used text messaging to teach undergraduate students to summarize.

In many courses throughout their college career, students in higher education are often expected to summarize a chapter in their textbook, an article in a published journal, a literary piece or content from online sources. However, instructors often assume that students understand the content they are reading and are proficient in producing summaries. Making meaning from printed material requires knowledge and use of reading comprehension strategies to apply when comprehension fails. Though there are a number of comprehension strategies, no student can learn all the strategies. For this reason, Pressley (2006) posits that strategy instruction should be conducted over an extended period of time, thus allowing its use to become self-regulated. The salient point here is that comprehension of text plays a critical role in summarization tasks. Although a plethora of research has shown that summarization instruction is effective in teaching students how to summarize, there is a lack of academic study and literature on the use of mobile wireless technology for teaching students in higher education how to summarize.

Summarization

Summarization is a complex task in which students are required to use their prior knowledge to perform cognitive processes on the information that is read. These cognitive processes include evaluating to distinguish key ideas from supporting or unimportant ideas, constructing logical connections between those key and supporting ideas, and condensing the ideas or information to present the gist in students' own words (Jitendra & Gajria, 2011). Making the determination of what is important and not so important in a text can reveal if comprehension has taken place.

Brown and Day (1983) developed an instructional model for teaching summarization whereby readers followed a set of rules as the basis for constructing summaries. Using a similar method, Rinehart, Stahl and Erickson (1986) trained students of various socioeconomic statuses to produce summaries that included main ideas with supporting information. In both studies, summarization instruction improved students' production of summaries.

Technology

Rapidly and evolving technology has brought about new options for communication, organization, and entertainment via technology-based devices such as mobile phones, smartphones, Personal Digital Assistants (PDAs), MP3 players, e-readers, and iPods (Kim, Mims & Holmes, 2006). These technological devices are not only gaining popularity for its original use, but for its use in education as well to support learning. The iGeneration of undergraduates have grown up immersed in video games, computers, cell phones, social networking, instant messaging, and the Internet (Rosen, 2011; Turner, 2009). Short messaging services (SMS) or text messaging is one of the fastest growing modes of communication among them (Carvus & Ibrahim, 2009; Plester, Wood & Joshi, 2009). It has brought a great deal of convenience, quickness, and a new language to those who use them. For digital natives or the iGeneration, the language of the digital world, “text speak,” is not viewed as an alternate speech, but as a basic and natural code of speaking and thinking (Turner, 2009). Motivalla (2007) asserts that wireless mobile phones are the most widely embraced technology used to send and receive text messages that has become embedded into the culture of adolescents. Yet, its popularity has not gained much interest in higher education as a teaching and learning tool.

Mobile Learning

Mobile learning (m-learning) is an approach to using wireless and mobile technologies to obtain or provide educational content by extending access to a desktop-based online environment to a handheld device such as a mobile phone (Motivalla, 2007). This approach to learning is based on the constructivist theory of learning in that learners construct knowledge in an authentic context. Wireless mobile devices offer a unique opportunity for teachers and students in different kinds of instructional settings. If appropriately facilitated, mobile learning can benefit students

by promoting and fostering collaboration and communication in formats that are most suited to students (Wagner, 2008). Instructors can also benefit by accessing services and interacting with students while on the go. To keep up with the increasingly prominent use of mobile technologies and to effectively facilitate mobile learning, it is imperative that instructors learn about and adapt to the changing environments, when and where appropriate. More importantly, instructors will have to shift from being transmitters of knowledge to facilitators of learning in order to create new learning pathways that are more situated, personal, collaborative, and student-centered.

The implications of mobile learning are momentous, and its potential effect on education is profound. The iGeneration and faculty who already use mobile devices will find ways to integrate them into all aspects of their daily lives—including the tasks of teaching and learning. As these devices become more sophisticated, they may coexist with or supplant other technologies to make learning more portable and effective. With the diversity of students and varying levels of comprehension, educators should take advantage of this new channel for learning in higher education by planning how to best utilize them in online and traditional classes (Kim, Mims & Holmes, 2006).

Teaching the Undergraduates

Students’ lack of summarization skills was evident in article summary assignments in my undergraduate courses, which required them to summarize articles from *The Reading Teacher* journal. Several times while grading the summaries, I found myself making comments such as, “this is retelling rather than summarizing,” “identify the main idea,” “provide statements to support the main idea” and or “identify the most important ideas found in the article.” It was obvious that after the second article summary assignment, students still did not understand the skill of summarizing. And even more importantly,

the comments made within their summaries had no bearing on subsequent summary assignments. Something more had to be done than simply writing comments within their assignments that they did not seem to understand or improve their summary writing.

My first task as the instructor of the course was to ensure that students understood the material they were reading. Comprehension strategies were taught using scientifically based reading research from peer reviewed journal articles and the textbook for the course. The teaching and learning of the strategies were a part of the course content and objectives, as this was an undergraduate reading methods course. Graphic organizers, repeated readings, reading response journals, read alouds, cooperative learning groups, mini-lectures using the direct instruction approach and other strategies were used to teach students how to comprehend the material and apply fix up strategies when comprehension failed. Since students were not able to use and apply all these strategies in one three-hour class session, these strategies were taught, reviewed and practiced for several weeks prior to the mid-semester point. After the strategies were taught, practiced and applied to the different texts (i.e. paragraphs from the textbook, research based articles from journals, and online sources), students were now challenged with the task of summarizing.

A modification to the framework of Rinehart, Stahl and Erickson (1986) and the incorporation of technology were used to teach students how to summarize. Since mobile wireless devices, specifically mobile or smart phones, are popular among college students, the instructor used a free text messaging application (TextNow) as a tool to teach summarization. Students were limited to 160 characters for each summarization task as this was the maximum characters for mobile phones. However, the number of characters for various smart phones exceeds 160 characters. For the sole purpose of concealing the instructor's mobile phone number, the text messaging application was

downloaded to the instructor's iPod, which allowed both the students and the instructor to send and receive messages to a phone number provided by TextNow. It is important to note that the use of TextNow with an iPod provided the same capabilities as a mobile phone.

The summarization instruction began with placing students in cooperative learning groups of four. The instructor then explained and modeled two of Brown and Day's (1983) rules- delete unnecessary information and delete redundant information. To keep the summarization instruction similar to that of Rinehart, Stahl and Erickson (1986), relate main idea to supporting information was also included as one of the rules.

Beginning with a paragraph from the textbook, the instructor and students read and discussed the paragraph. The instructor modeled how to write down only the main ideas and supporting information by "thinking aloud" five sample paragraphs and having individual students to do similar "think alouds." Next, the instructor modeled how to produce a summary of one of the five paragraphs using the following checklist: (1) Have I found the overall idea that the paragraph or group of paragraphs is about? (2) Have I found the most important information that tells more about the overall idea? (3) Have I used any information that is not directly about the overall idea? (4) Have I used any information more than once? Afterwards, the instructor composed a summary of the sample paragraph in text messaging format using text speak or text language. The message was sent to each cooperative group. A discussion of the summary statement and the text message sent occurred and students were given the opportunity to make comments and ask questions for clarity. Next, each cooperative group summarized the remaining four paragraphs and sent the instructor summaries via text messaging using text speak or text language as well. During the second half of the class session, individual students practiced summarizing single paragraphs while the instructor provided individual and class feedback.

Due to the length of the class session, one 3-hour session per week, the continuation of the summarization instruction was carried into the following class meeting. During this time, cooperative groups summarized multiple paragraphs from both the textbook and research articles and then summarized the summaries of each paragraphs. Again, the instructor provided feedback to the students. Moving from summarizing multiple paragraphs into one, students were directed to summarize an entire research article without first summarizing individual paragraphs. This task proved to be difficult for some students at first as the students had to be reminded to add supporting details to the main idea of the article. The limitation on the number of characters to be used in the text messages forced students to further condense the information to simply provide the gist of the article. This also proved to be frustrating and challenging for students. It appeared that while in cooperative groups, students were able to produce proficient summaries of the entire article. However, when summaries were produced individually, many of them were inadequate. Because of the continued frustration and difficulties of individual students producing proficient summaries of an entire article, the summarization instruction was extended to another class meeting.

During the third class meeting, the instructor modeled and explained again to students how to summarize. The problem seemed to have been that when students worked alone to produce summaries of the entire article, it was difficult. It was not clear to the instructor if cooperative learning groups affected students' summaries or the task of producing a summary of an entire article without first summarizing individual paragraphs. With this dilemma, the instructor continued to allow students to work in cooperative learning groups to produce summaries by summarizing individual paragraphs first and then summarizing the summaries of each, then providing a summary of the entire article. The summarization of individual paragraphs and then summarizing the summaries of each of those paragraphs appeared to be the

“ah ha” moment for both the students and the instructor.

Analysis of the summarization instruction using mobile wireless phones proved to be beneficial to students. Students enjoyed the use of a mobile device to send and receive messages; its use fostered collaboration and communication. They felt less threatened when completing the assignment because they did not have to concentrate on correct spelling and could text freely. However, the students that experienced difficulties constructing summaries of the entire article without summarizing individual paragraphs first, found it difficult to identify the main idea of the entire article. The students also preferred to work in cooperative learning groups rather than working independently to create a summary of the entire article. As for the instructor, the most challenging part of the summarization instruction was the understanding of text language students used in text messages. Their texts contained letter/number homophones (2moro, gr8, 2nite); g-clippings (goin, comin, talkin); omitted apostrophes (cant, wont, dnt); nonconventional spellings (fone, skool, wuld); and shortenings (b, u, n).

After the summarization instruction, students' production of summaries improved greatly. There were significantly less retelling in their assignments and the supporting details contained important information to support the main idea. There were no problems translating the text messages to Standard English when students completed summary assignments after the instruction.

Everyday, new technologies, new methods, and new pedagogies are changing the faces of education. As mobile technologies become increasingly prominent in the lives of college students worldwide, institutions of higher education should find innovative ways for the use of these popular devices for a range of different teaching and learning purposes.

References

- Brown, A., & Day, J. (1983). Macro rules for summarizing texts: The development of expertise. *Journal of Learning and Verbal Behavior*, 22, 1-16.
- Carvus, N., & Ibrahim, D. (2009). M-learning: An experiment in using SMS to support learning new English language words. *British Journal of Educational Technology*, 40(1), 78-91.
- Jitendra, A. K., & Gajria, M. (2011). Reading comprehension instruction for students with learning disabilities. *Focus on Exceptional Children*, 43(8), 1-16.
- Kim, S., Mims, C., & Holmes, K. (2006). An introduction to current trends and benefits of mobile wireless technology use in higher education. *AACE Journal*, 14(1), 77-100.
- Motivalla, L. (2007). Mobile learning: A framework and evaluation. *Computers & Education*, 49, 581-596.
- Plester, B., Wood, C., & Joshi, P. (2009). Exploring the relationship between children's knowledge of text message abbreviations and school literacy outcomes. *British Journal of Developmental Psychology*, 27(1), 145-161.
- Pressley, M. (2006). *Reading instruction that works: The case for balanced teaching*. (3rd ed.) New York: Guilford.
- Rinehart, S. D., Stahl, S. A., & Erickson, L. G. (1986). Some effects of summarization training on reading and studying. *Reading Research Quarterly*, 21(4), 422-438.
- Rosen, L. D. (2011). Teaching the iGeneration. *Educational Leadership*, 68(5), 10-15.
- Turner, K. H. (2009). Flipping the switch: Code switching from text speak to standard English. *English Journal*, (5), 60-65.
- Wagner, E. D. (2008). Realizing the promise of mobile learning. *Journal of Computing in Higher Education*, 20(2), 4-14.

Author's Note

Angela Ruffin Williams, Ed.D., is an Assistant Professor in the Department of Elementary/Early Childhood Education at Alabama A&M University.