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Multiliteracies: Bringing Multimodality into Schools

by
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A capstone project submitted to the Department of Education and Human Development
of The College at Brockport, State University in partial fulfillment of the requirements
for the degree of Master of Science in Education

Table of Contents:

Abstract

 Today's technological advancements provide cause for literacy educators to think about

literacy as many literacies or *multiliteracies* (Cimbricz & Rath, 2015). This analytical

review explores the construct of multiliteracy in hopes of discovering how to help

students become multiliterate and learn the many literacies important to today's world.

This review examines four case studies that speak to the actual impact multiliteracies has

on student and teacher learning. My analysis suggests that in some cases, student

engagement improved when the teaching and learning of multiliteracies were used in

schools. Furthermore, the integration of multiple modes of meaning making seemed to

better meet the needs of all students in the classroom. Unfortunately, mot much is known

about multiliteracies, and its actual impact on student and teacher learning remains

relatively unknown.

Introduction:

As a young learner, I always found myself more engaged when the learning involved using multiple senses. Whether it was dancing around desks to learn about how planets revolve around the sun, watching filmstrips to see what trench warfare looked like in World War, or singing "Row Row Row Your Boat" to memorize the quadratic formula, the use of multiple modalities (e.g., gestural, visual, audio, linguistic) – when coupled with technology – helped me learn.

As a teacher, and in my experience working with students who have multiple and complex disabilities, I was reminded of how important technology and multimodality are to learning. While teaching a lesson that involved 'reading a book' with audio and visual imagery using a SmartBoard®, it finally dawned on me: Maybe there are students out there who, like me, learn more effectively when it involves using multimodalities and technology. I also wondered how I might combine multimodality and technology to help my students learn the many literacies important to today's world.

Today's technological advancements provide cause for literacy educators to think about literacy as many literacies or *multiliteracies*. According to Cimbricz and Rath (2015), the concept of multiliteracies "attends to the diversity of language and culture and the multiple dimensions of visual, aural, and media in multimodal texts, largely enabled by technology" (p. 2). As such, "literacy becomes less of a singular 'thing' and more of a set of shifting or adaptive practices for communication among individuals and groups within social and cultural settings, or multiliteracies" (p. 2). Cimbricz and Rath (2015) argue that this expanded definition of literacy provides cause to think about text broadly defined (i.e., visual, spatial, linguistic, gestural, audio) and text as information. To keep

up with the many literacies enabled by technological advancements, it is important for us, as teachers, to help students become multiliterate and prepare them for today's world as well as the future. [1.]

Two ideas are important to understanding the construct of multiliteracies. First, to be multiliterate, a person must be literate in multiple modes of meaning making Cazden, Cope, Fairclough, Gee, Kalantzis, Kress, Luke, Luke, Michaels, Nakata, 1996) and "being cognitively and socially literate with paper, live, and electronic texts" (Antsey & Bull, 2006, p. 23). Second, a person is multiliterate when s/he recognizes that a particular context requires certain literacy practices, and that s/he can strategically apply those practices to the setting (Antsey, M. & Bull, G. 2006). Antsey and Bull (2006) confirm: "The *multi* in multiliteracies is about the… need for multiple forms of knowledge and understandings about literacy and social contexts that enable appropriate and successful performance in all aspects of life" (p. 21). To help students become multiliterate, it is important to help them learn how to: 1) be cognitively and socially literate with a variety of texts or information; and 2) strategically choose and use literacy strategies appropriate for the situation for which they are needed.

A key aim of multiliteracies is the bridging of literacies that students use at home/outside of school and those they use in schools. In so doing, students importantly draw on their *funds of knowledge* to enrich the literacies learned in school Moll, Amanti, Neff & Gonzalez, (2001) define funds of knowledge as "the knowledge and skills found in local households" (p.132)**.**

[1.] It is important to note that throughout this paper, multiliteracy and multiliteracies will be used interchangeably.

So how can teachers help K-12 students become multiliterate? In this analytic review, I discuss what is important for teachers to know, as well as what teachers can do to help students gain the multiliteracies valued in today's world. Students need to have the opportunity to learn about multiliteracies, or else they will be at an extreme disadvantage when it comes to learning the literacies that are commonly used in the 21st century (Cazden, et al., 1996). Before studying how teachers implement this pedagogy (method and practice of teaching) in schools, it is vital to understand why the term multiliteracies was created.

History of Multiliteracies

The construct of multiliteracies was first introduced in 1996, when a group of literacy educators met in New London, New Hampshire for a conference. At this conference, the group was especially concerned with the state of literacy and how the growth of technology was changing what counted as 'literacy.' As technology was changing, so too was literacy. Literacy was becoming more multimodal, and text was no longer limited to being paper-based. For example, with the invention of the Internet, students could publish their writing digitally through avenues such as blogs. The New London Group (1996) confirms,

> *"[new] communications media are reshaping the way we use language. When technologies of meaning are changing so rapidly, there cannot be one set of standards or skills that constitute the ends of literacy learning, however taught"* *(p. 64).*

The group, which eventually would be called "The New London Group," agreed that literacy in schools needed to keep up with the developments of the world (Cazden, et al., 1996).

The New London Group put forth an approach to teaching and learning that focused on multimodality, or the many modes in which information is presented and learned in a digital world. Six different design elements ("modes of meaning") are important to this approach: linguistic, visual audio gestural, spatial, and multimodal (Cazden, et al., 1996. p. 80). These different modes of meaning are mediums, or different ways to support the development of multiliteracies.

Building on the many literacies valued in the 21st century, and the funds of knowledge students already possess can help them more successfully learn in school (Moll, et al., 2001). Moreover, by broadening literacy to include multiple and varied literacies (e.g., *multi-literacies*, *new literacies*, *digital literacies*, *multi-modal literacies, 21st-century literacies and/or fluencies*), we as educators, can more richly (and justly) support adolescents' ongoing literacy development, learning, and future success in college, in the workplace, and in life (Cimbricz & Rath, 2015).

 In this analytic review, I sought to discover what value, if any, the teaching and learning of multiliteracies have in K-12 classrooms. I explored how teachers are using multiliteracies in K-12 classrooms. In addition, I sought to find how teachers are using multiliteracies in their classrooms in hopes of discovering how teachers can effectively implement this pedagogy to meet the needs of all students in their classroom. Accordingly, this analytic review focuses on two questions:

- What does the teaching and learning of multiliteracies mean and look like in actual practice?

- What impact, if any, does the teaching and learning of multiliteracies have on teachers and their students?

The purpose of this analytic review is to identify what is important to know about the teaching and learning of multiliteracies in K-12 classrooms.

Methodology

Analysis of recent and relevant literature related to my topic is crucial when studying how teachers can effectively implement multiliteracies into their classrooms. Clark and Creswell (2010) define a literature review as "a written synthesis of journal articles, books, and other documents that summarizes and critiques the past and current state of information about a topic, organizes the literature into subtopics, and documents the background for a study" (p. 119). This analytical review synthesizes a collection of articles and documents to summarize the past and current state of multiliteracies. In addition, I also organize my research into subtopics, based on my research questions, to help document the background of multiliteracies.

Clark and Creswell (2010) argue that researchers review literature to learn what is and is not known about a study's topic and research problem. A good review of literature provides important background knowledge that shows researchers what has been done, what still needs to be done, and how best to go about doing it (p. 118). Similarly, Shagoury and Power (1999) indicate that "one of the main purposes of a literature review is to understand what a conversation has been about in a specific area of research, gaps

that have taken place in the conversation, how the conversation has led to important findings, and places where the conversation needs to change or grow" (p. 181).

Articles reviewed for this paper were found using the ERIC (Educational Research Information Center.) database. By typing in *multiliteracy* as a key word, I was able to cross-reference 269 articles to find sources that would help me with my research. Next, I limited my search to articles containing full text, which brought me to 150 texts. Of the 150 remaining articles, I chose texts that contained case studies that focused on a different mode of meaning making (as defined by the New London Group). I wanted to make sure that I used case studies that highlighted all six of the modes of meaning making so each could be fairly represented. This initial search led me to discover several case studies that showed what teaching multiliteracies actually looked like, and find out its actual impact at the classroom level. In addition, this search uncovered how teachers may best be able to implement multiliteracy as an instructional approach or pedagogy. With the exception of the New London Group's groundbreaking article on multiliteracies, I limited my review to case studies published within the last ten years. In the next section, I reveal the discoveries I made while reviewing the four case studies.

Findings

Since the New London Group's publication of multiliteracies in 1996, researchers have pointed out that teachers need to bridge the literacies that students use at school with those they have access to at home (Fabos, B., & Lewis, C, 2000) and agree that the literacies that students need to know are changing (Jewitt, K., 2008). There is little evidence, however, that specifies that actual impact that teaching multiliteracies in schools has on student learning. Furthermore, Jewitt (2008) confirms,

"Although some educational systems now officially recognize the importance of

multiliteracies and multimodality (e.g., state curricula in Australia, South

Africa, and Canada), the implications of this work for teacher education and

curriculum policy are still emerging" (p. 261).

Because of the lack of data that shows teaching multiliteracies is research proven, in this analytic review, I focused on four case studies. These studies show lessons that not only demonstrate what this pedagogy looks like in actual practice, but also provide insight on some of the impacts using multiliteracies have on teachers and their students.

As I reviewed the literature, I focused on case studies that addressed the six modes of meaning that the New London Group identified as important to multiliteracies specifically, linguistic, visual, audio, gestural, spatial, and multimodal meaning (Cazden, et al., 1996. p. 80). Gained from this review was the idea that the linguistic and multimodal modes of meaning making are critical to becoming multiliterate. This means that teachers need to use the linguistic and multimodality design elements with at least one other mode of meaning (visual, audio, gestural or spatial) in order to effectively support the use of multiliteracies. Lessons in the case studies reviewed in this paper were taught to students in hopes of improving student engagement and learning. A description of these four case studies will show what teaching multiliteracies looks like in actual practice, while using the six different representations of meaning making.

The first case study involves five different lessons, three of which I will discuss because they use different modes of meaning making. Each of these three lessons show what teaching multiliteracies looks like in actual practice, and come from a community event from Malaysia. Although this community event was not located in a school, I

included this case study because it provided lessons that were taught by actual

schoolteachers to students they would typically instruct. The lessons taught in the

community event aligned with my research questions, and provided me with the data

needed to explore my objectives of this analytical review.

Researchers created a Multimodal Community Literacy Project, which was a day

- long literacy event that used multiliteracies (arts and crafts, songs, videos, movies, and

storytelling) to facilitate an understanding of parents' participation in social literacy

practices at home (Boivin, N., Albakri, R., Zuraiyah, M., Mohammed, H., & Muniandy,

N., 2014). At the Multimodal Community Literacy Project, five lessons were presented

to parents and their children, each incorporating a mode of multiliteracy.

The first lesson from the literacy event was centered on storytelling as a way of

teaching literacy to young children, primarily using gestural meaning during instruction

(Boivin, et al., 2014). During the lesson, a teacher read the story *The Enormous Turnip* to

a group of young students. Children were "provided the opportunity to act out the

character, repeat the vocabulary in the story in a choral fashion, and use Total Physical

Response (TPR) to connect actions with the meaning of the vocabulary" (Boivin, et al.,

2014, p. 41). In addition, the storytellers used gestures and emphasized their voices to

capture the meaning of targeted vocabulary words from the text. Throughout the lesson,

the children were encouraged to act out the story using a TPR approach, enhancing the

use of gestural meaning.

After the story was acted out, students grouped up into pairs to begin the second

part of the lesson: the scavenger hunt. Students needed to match vocabulary words (from

the story) with pictures that were hidden around the campus of the literacy event. Boivin,

et al., (2014) stated that this "enabled repeated exposure of the printed word in conjunction with a visual representation" (p. 41). Once students found all five of the pictures that were hidden around the event, each was awarded a small prize as a sense of personal pride.

Although this lesson focused on having students use gestural meaning, it shows how multiple modes of meaning making important to multiliteracies were incorporated. The storytelling portion of the lesson used the gestural mode of meaning by allowing students to act along with the story, while the children were also encouraged to use audio meaning by repeating and emphasizing what they story tellers were saying. Students also used visual and linguistic meaning while matching the vocabulary words with the pictures during the scavenger hunt. This lesson highlights how multimodality was used with multiliteracies.

The second lesson from the literacy event was a series of action songs that were performed. Like the storytelling lesson, the action song combined multiliteracies with multimodality, but used audio meaning as the key mode of meaning making. Several children's songs were chosen that allowed for TPR, changes in speed and tempo, and even purposeful fluctuations in voice. The songs taught vocabulary to students, intertwined the meaning of the words with the actions of the performers, and encouraged the children to follow along by singing and acting throughout the performance (Boivin, et al., 2014). Furthermore, students were able to watch a video that modeled how they could use their body and facial expressions to convey meaning while the songs were being played. For example, during the enactment of the *Itsy Bitsy Spider*, teachers were able to model how the children could use their fingers to crawl like a spider (Boivin, et al., 2014).

This lesson allowed students to first and foremost use audio meaning as literacy. Students needed to rely on the song's words in order to gain an understanding of the story. However, students also used linguistic, visual, spatial and gestural meaning while they were acting out the song. This lesson is a perfect example of how multiliteracies were united with multimodality: the video from this lesson allowed children to use visual and gestural meaning, while the action songs gave students the opportunity to use audio, linguistic, gestural and spatial meaning.

The last lesson from the Multimodal Community Literacy Project focused on teaching younger students the English vocabulary words for parts of the face (*e.g., ears, mouth, nose, etc.)* by using spatial meaning. The teacher started by simply creating the sock puppet out of ordinary materials that can be found at almost any home. The researchers observed that student engagement improved right away. Once the sock puppet was created, the puppeteer began pointing to different parts of the puppet, asking students to recall what the English word was for the body part that was being presented. Boivin, et al., (2014) stated, "This was an emergent literacy practice parents could easily participate with their children. It connected the meaning of the vocabulary within an applied learning context" (p. 44). After the students had the opportunity to yell out the answers to all of the questions asked by the puppeteer, students were given the opportunity to make their own sock puppets, and were encouraged to yell out the English vocabulary words that they were learning during the lesson. The puppeteer helped foster spatial meaning for the students by allowing them to use their surroundings while making their own sock puppets, and promoted linguistic meaning by connecting the body parts with the vocabulary terms they were learning, yet another example of using

multiliteracies and multimodality together.

Researchers Xiuwen Wu and Mark Newman (2008) conducted a case study in which they wanted teacher candidates to learn how they could teach all students – especially those with disabilities – with types of literacy that were not centered on text-based learning. As a research project, they conducted a case study in which social studies teacher candidates taught students a series of lessons, using a visual literacy curriculum. Wu and Newman (2008) state, "In history and social studies, visual literacy involves the use of maps, pictures, views, photographs, etc. to promote learning. These visuals, primary and secondary sources, can be used with verbal texts or independently" (p. 2).

Before the teacher candidates taught their students, each was given instructional guidelines on how to teach the visual literacy curriculum, approximately ten hours of instruction for each candidate. Wu and Newman (2008) explain the curriculum that each teacher candidate taught in this case study:

> *"The curriculum follows a progressive sequence from observation and labeling to interpretation using graphic organizers to facilitate learning. Specifically, there are four strategies combining the use of visual images (both primary and secondary sources) and graphic organizers: Visual Labeling Strategy, Reading for Content Strategy-Visuals with or without Actions strategy, Reading for Analysis to Understand Why Strategy, and Reading for Interpretation to Assess Significance Strategy. All strategies exist in three formats for teachers to easily adapt them for instruction: on paper, as PowerPoint templates, and on the web"* (p. 7).

Students in this case study used visual meaning throughout the curriculum in many ways. In the first strategy (visual labeling), students had access to an image, in which they were asked to label the most important features of the picture. The second strategy (reading for content-visuals) gave students the opportunity to look at an image, activate their background knowledge, so they could identify what the picture was (Wu, Xiuwen & Newman, Mark, 2008). This case study showed how teachers can use visual design as a multiliteracy in their classroom.

Another case study that shows what multiliteracies look like in practice comes from a summer program that took place in a traditional classroom and computer lab, located in the southeastern United States. During the summer program, students in 7th and 8th grade were chosen because they spoke languages other than English at home (Angay-Crowder, Choi, Yi, 2013). During the first week of the summer program, students discovered what 'digital storytelling' was, and learned how it could be created. Throughout the first week, students used multiple modes of meaning (visual, audio, linguistic, multi-modal) while completing the digital storytelling (Angay-Crowder, Choi, Yi, 2013).

The second week of the summer program focused especially on assisting students to digitally write their own narratives, and using resources (music, pictures) from the Internet. Furthermore, Angay-Crowder, Choi and Yi (2013) state, "While engaging in these writing activities, each student or group had a writing conference (which was overt instruction) with each of us (p. 41). This shows that the teachers zeroed in on using linguistic meaning during this week of the summer program.

Weeks 3-4 of the case study used all six modes of meaning making (visual, audio,

linguistic, spatial, gestural, multimodal). Students worked on using the Internet as a

resource to create a multimedia presentation, based on the digital narratives they wrote

during the first two weeks of the program, and then spent time reflecting on the process

by presenting their narratives in front of the entire class. Throughout the four-week study,

students were able to use multiliteracies to draw on their experiences from home and

from school, while using all six modes of meaning making.

Kitson, Fletcher and Kearney (2007) studied a classroom for five months in

Australia that used a major instrument for multiliteracies – Interactive and

Communication Technologies (ICT'S). The ICT that was used for this case study was

and Interactive Whiteboard (IWB), because it allows teachers to use multiliterate

practices while reading multimodal texts (Kitson, L., Fletcher, M., & Kearney, J. 2007).

Kitson, Fletcher and Kearney (2007) state that an IWB "uses a computer, a touch-

sensitive screen and a data pro- jector to provide both audio-visual presentation and links

to a host of electronic and multimedia resources, provides a context for examining in

what ways a teacher imple- mented the multiliteracies and technology approach pro-

moted in Queensland curriculum documents" (p. 29). This shows that the IWB has the

potential of using multiple modes of meaning making. The IWB offers an example of

how multiliteracies can be taught in schools because it combines linguistic meaning-

making with the potential of being multimodal by using the audio and visual modes of

meaning.

Kitson, Fletcher and Kearney (2007) studied a fourth-year teacher as she taught

her primary school aged-students using an IWB over a five month period. Over the five

months, the teacher used an IWB in several different ways, including accessing the

Internet, as well as to the school Intranet, using Photostory®, PowerPoint®, and the Smart

Notebook® software. Students learned through multiple modes of learning while using

the IWB over the five month period, including audio design, visual design, and linguistic

design as modes of meaning making.

These four case studies not only show what multiliteracies involve, but also

model how teachers can incorporate multiliteracies into their own classrooms with the

support of multimodality. These lessons show that when multiliteracies are supported

with multimodality, when paired with technology, student engagement can improve.

Additionally, it was found that multiliteracies are best implemented in schools when

bridged with the literacies students use at home. Next, I discuss how the students and

teachers involved in these four case studies were impacted by the implementation of

multiliteracies.

Student/Teacher Impact

Now that we have seen what teaching and learning multiliteracies mean and look

like in actual practice, I examine the impact on learning. I will draw upon qualitative, and

in some cases, quantitative data that the researchers for each case study observed, and

attempt to discover any patterns that even slightly suggests that teaching multiliteracies

benefits students.

As mentioned earlier, the main purpose of the Multimodal Community Literacy

Project in Malaysia was to facilitate an understanding of parents' participation in social

literacy practices at home (Boivin et al., 2014). However, while studying students and

interviewing their parents at the end of the event, a number of observations were noted.

For example, Boivin et al., (2014) noted that in every lesson, student participation was

excellent. By using multiple modes of meaning in all five of the lessons, students seemed engaged, and were interested to learn about songs, stories and even parts of the human body. One mother shared the sentiment that her child seemed engaged and interested in the lesson, saying that her daughter "really enjoyed the songs she still sings them (songs)" (p. 41). This quote was taken two months after the literacy event, and suggests that the effects of teaching multiliteracies may be long lasting.

Boivin et al., (2014) also discovered during this case study is that parents wanted to help bringing the literacies that students used in schools with those they have access to at home, but were unaware of how to do so. The main goals of this literacy event were to find the parents' understanding of social and multiliteracy practices, and to model how parents could use different social literacy practices at home. Even something as fun as storytelling can be considered a medium for learning, and can be taught at home. But as Boivin et al., (2014) point out, we must first teach parents what multiliteracies are, and then begin showing how they can help their children learn using different modes of meaning. Boivin et al., (2014) advise teachers to facilitate communication with parents to help them understand what different social literacy practices look like. Furthermore, Boivin et al., (2014) contend, "as educators, we must build professional learning communities which can be accessed by parents. With the advent of technology, educators can easily create on-line learning communities. Therefore, schools can connect to home and communities" (p. 50). This case study showed that students were not only engaged and interested when working with multiliteracies, but also that increased parent knowledge can help bridge the literacies that students use at school with those they have access to at home.

While observing teaching candidates use a curriculum focused on the implementation of visual literacies, Wu and Newman (2008) recorded data that showed the potential effectiveness of multiliteracies. Wu and Newman (2008) surveyed the teaching candidates, who overwhelmingly not only agreed that their lessons centered on using visual literacy were effective, but also felt that their students' responses to the use of the visual label strategy were positive. The data shows that 25 of the 27 teaching candidates felt that the implementation of visual literacies were effective, while 25 of the 27 teaching candidates also agreed that their students' response to the lessons were positive.

In addition to surveying the teaching candidates in this case study, Wu and Newman collected data from the students involved. When asked if "the picture activities used in this lesson helped me understand the content better?" 16 out of 18 students said "yes" (Wu & Newman, 2008, p. 17). In addition, Wu and Newman (2008) noted that 13 out of 18 students felt that the graphic organizers used in the visual literacy curriculum helped them to better understand the content in the class. Xiuwen Wu and Mark Newman provide data that shows that teachers and students both feel that using visual literacy as a mode of meaning was not only interesting, but was an effective way for the students to learn the content.

During their four-week case study on 7th - 8th graders in the southeastern United States, researchers Angay-Crowder, Choi and Yi (2013) found that students were able to use their knowledge and literacies that they use at home, and apply their skill set while working with multiliteracies in the classroom. In addition, it was discovered that while using all six modes of meaning making, students felt that they were more engaged in the

summer program. However, Angay-Crowder, Choi and Yi did uncover a negative impact of using multiliteracies in schools: students could not use some of the literacies that they used during the four-week program at home. Angay-Crowder, Choi and Yi (2013) confirm, "…students could not continue to engage in multiliteracies practices after the summer program because of limited technological resources in their homes" (p. 44). Students could not improve upon the literacies they used in the classroom because they did not have the required technology at home. Although students were able to stay engaged while using multiple modes of meaning making in the classroom, the use of multiliteracies in this classroom was not effective simply because students did not have access to those types of literacies at their homes.

While looking over their observations from the ICT lessons in Australia, researchers Kitson, Fletcher and Kearney (2007) found that the teacher did use linguistic meaning in her instruction, but failed to incorporate other modes of meaning making that technology has made possible. They concede that the teacher "…embraced the first dimension of a multiliteracies framework by using a variety of ICTs and multimedia or multimodal texts. However, her teaching practices essentially focused on a print-based approach, omitting the modes of communication that multimodal texts offer (p. 40)". This finding shows that even though teachers may use technology that has the potential for being multimodal, multiliteracies are not sufficiently used in the classroom unless all six modes of meaning making are taken into account.

These six case studies show that it is critical to use at least three modes of meaning making. The teachers in these studies used multimodality in their lessons to provide instruction that was geared towards students' funds of knowledge, which resulted

in improved student engagement, and created a better learning environment for everyone in the classroom.

Conclusions

The purpose of this analytical review was to identify what is important to know for the teaching and learning of multiliteracies in K-12 classrooms. While looking at four case studies that used multiliteracies in the classroom, I focused on two research questions:

- What does the teaching and learning of multiliteracies mean and look like in actual practice?

- What impact, if any, does the teaching and learning of multiliteracies have on teachers and their students?

My analysis of the four case studies pointed to three themes. First, while using multiliteracies in schools, teachers need to use the linguistic design with at least one other mode of meaning (visual, audio, gestural or spatial) in order to effectively have multimodality support the use of multiliteracies. Second, student engagement in school improves when teachers bridge the literacies important to school with the literacies students use at home. This "bridging" is critical to multiliteracies. Third, many times parents are unaware of how they can bridge the literacies that students use in at home with those they use in school. Unfortunately, a major reason why parents cannot bring multiliteracies into their homes is because they do not have the necessary technology.

Implications for Student Learning

What is clear from this review is the sense that multiliteracies benefit students.

The four case studies showed how using the linguistic design and multimodality can improve student engagement in the classroom.

Implications for My Teaching

First, this analytical review allowed me to create a formula to help best support the use of multiliteracies in the classroom: While using multiliteracies in schools, teachers need to use the linguistic and multimodal design with at least one other mode of meaning (visual, audio, gestural or spatial) in order to effectively help students become multiliterate. For example, in an Interactive Whiteboard (IWB) lesson about the causes of the American Revolution, I can use the six modes of meaning. In this type of lesson, I would make sure that I was using at least the linguistic, audio, and visual modes of meaning while using the IWB. This allows me to ensure all of my students' needs are being met in multiple and varied ways.

Second, while using multiliteracies, I will be able to more fully engage students and help them potentially learn more. Teachers benefit when students are more engaged because the classroom environment is vastly improved. Students become more interested in the lesson, classroom disruptions are reduced, and student participation increases (Zammit, K., 2011).

Third, research from this analytical review has revealed that I need to be more strategic in my communication with my students' parents. In doing so, I can show them the literacies that I use during instruction. They in turn can begin using multimodality with their children at home. Students benefit when they are able to bridge the literacies that they use in schools with those they have access to at home (Guo & Tan, 2013). Unfortunately, this analytical review has shown that parents often times do not know how

to do bridge the literacies between school and home. I benefit from knowing this because I will now provide a clearer focus and connection between school and home. This connection can help parents better understand the literacies their children are learning in schools. If teachers connect with parents and share the literacies they use in school with their children, students can engage in literacy practices at school and at home.

Recommendations for Future Research

First, much of what is important to multiliteracies is important to the Universal Designs for Learning (UDL). Hartmann (2015) defines the UDL framework as "teaching and learning as a dynamic system that must be reformed to better meet the needs of learners in the 21st century" (p.57). A UDL framework uses multiple and varied ways to help students learn. Furthermore, Hartmann (2015) discussed how there are three principles important to the implementation of UDL: 1. To provide multiple means of engagement. 2. To provide multiple means of representation. 3. To provide multiple means of action and expression.

Similarly, multiliteracies are supported when using the six different modes of meaning making (as defined by the New London Group). In this analytical review, I provided four case studies that showed how teachers could use each mode of meaning in their instruction. While implementing multiliteracies in the classroom, it is important that teachers meet the needs of all students in the classroom, and one way of doing this is by using a UDL framework.

When a teacher uses UDL in their classroom, they differentiate their instruction so they can best meet the needs of all students in their classroom. For example, for students who are blind and learn best using the audio mode of meaning making, teachers

should use a UDL approach and incorporate multiliteracies that focus on the audio design element. Alnahdi (2014) confirms the importance of blending multiliteracies with a UDL framework, stating, "designing environments and educational settings that are accessible to everyone, with and without disabilities, will reduce the need for individual accommodations" (p.19). In other words, when teachers implement multiliteracies that are multimodal, they are using a UDL framework because they are using multiple modes of meaning making that can meet the needs of all students in the classroom.

Having a UDL framework while implementing multiliteracies sounds easy on paper, but more research needs to be done to show the potential effectiveness of blending these two frameworks together. Additionally, more research that demonstrates how teachers can blend multiliteracies and UDL together is needed so all student needs in the classroom can be met.

Second, more empirical research is also needed to determine the actual and potential effectiveness of integrating multiliteracies in schools. While conducting research on multiliteracies, few literature reviews showed what is known about the pedagogy. In order to evaluate the effectiveness of multiliteracies, it is vital to have literature reviews that first show what this pedagogy entails. The truth is, implications of multiliteracies and its effectiveness are still emerging. There needs to be more empirical research that shows what is in fact known about multiliteracy. Furthermore, there needs to be more qualitative and quantitative data that provides sound reasoning to use multiliteracies in schools. Before teachers implement multiliteracies in their classrooms, they want to see more benefits of using this pedagogy.

Third, we need to discover more ways in which students can bridge the literacies

they use in schools with home. Students benefit when they are able to bridge the literacies they use in schools to their homes. Unfortunately, some children do not have access to the technology that is required to use multiliteracies in their homes. Providing technology in students' homes is no easy or simple fix. Perhaps we can research ways in which students can use community resources that enable them to use multiliteracies outside of school?

Final Thoughts

Looking back to when I was a young student, I realized that I was more engaged, and learned better, when using all of my senses. I was drawn to the idea of multimodality, especially when linked with technology. This interest led me to discover and explore the construct of multiliteracies. Improvements in technology have given us a reason to redefine literacy as multiliteracies, but what was this fancy new term (Cimbricz & Rath, 2015)? The New London Group (1996) importantly changed literacy when they introduced the term multiliteracies and laid out six different modes of meaning making for educators to consider. That said, little is still known about the actual impact the teaching and learning of multiliteracies actually holds. This review points out there is considerable value in continuing to explore this concept.

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