

Connected Learning: Technology and Collaboration in the Writer's Workshop

by

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Abstract

The purpose of this project is to explore the ways in which techniques of collaborative writing can be implemented on new and emerging technological platforms to enhance or alter the Writer's Workshop in elementary classrooms. This topic is relevant to the revised 2016 B.C. curriculum, which emphasizes the importance of digital literacy and collaboration for effective learning. The theoretical frameworks of Social-Constructivism and Multiliteracies are used to approach this project. Topics discussed include the practical implementation of the two frameworks in the ELA classroom, and the effects of collaboration and technological integration on students' engagement, revision processes, and co-authorship. Findings of this literature review demonstrate that technology-based collaboration can improve learner engagement, ease of revision, quality of peer-feedback, and productive co-authorship, and that the strategic implementation of technology is essential. Cautions and strategies for effective implementation of these techniques are discussed. The project concludes with a critical reflection on the integration of technology-based collaboration into the author's teaching context.

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Dedication

To Alfred, with love.

Chapter 1

INTRODUCTION

Writer's Workshops and collaborative digital composition have become increasingly prevalent in contemporary Elementary schools. For this project, I research the ways in which these approaches can be applied together for the benefit of students' literacy learning. In this chapter, I describe the changing views and practices within Language and Literacy education that have facilitated these two approaches. I will also discuss the connections of Writer's Workshop and collaborative digital composition to British Columbia's revised curriculum. I then explain selected observations and circumstances within my own teaching context that have led me to investigate this topic. I conclude this chapter by stating my research topic and providing an overview of what is to follow in this project.

Historical Educational Context

The instruction of writing in Elementary schools has undergone a major transformation within the past few decades. Once, students would toil quietly and individually creating by-the-numbers texts tailored exactly to their teacher's specifications. Writing was only valued for the final products that students composed. During the 1980s and 1990s writing instruction, influenced by researchers such as Flower and Hayes (1980), turned to a focus on writing as process. This process approach continues today. Contemporary teachers are no longer content to simply ask their students to prove that they can follow instructions. Literacy education today requires students to apply their unique, individual skill sets, think critically, solve problems, and learn through lived-experience, rather than just copying and memorizing solutions. Writing tasks have become increasingly student-driven, with rigidly-structured essays being replaced by process-oriented Writers' Workshops and "Six Trait" explorations (Spandel, 2013).

Writer's Workshop has changed the way teachers and students alike, from the elementary to the secondary school level, conceptualize the acquisition and development of writing skills (Spandel, 2013). By focusing on the process of writing, rather than the production of finished pieces, students can explore, experiment, and discover their own strengths and challenges (Spandel, 2013). This shift away from teacher-directed writing instruction and toward student-centered learning through exploration is based on the idea of "authenticity." Teacher-directed writing instruction has been criticized for being "inauthentic" (Jones, 2015). That is, professional writers and published authors write in a way that is unlike the teacher-directed instructional model. "Authenticity" in the writing process refers to the students' opportunities to write using the same strategies as professional authors use, and to write purposefully as a means of self-expression (Jones, 2015). Authenticity increases engagement, which refers to the students' willingness to participate and desire to experience personal satisfaction from their work (Jones, 2015). Writer's Workshop increases both authenticity and engagement, providing a learning environment suited to the individual development of each student, and is therefore rapidly supplanting the teacher-directed model of formulaic writing.

Alongside this shift in writing instruction comes another shift in the thinking surrounding the very concept of what it means to be literate. Multiliteracies (New London Group, 1996) and 21st century literacies (NCTE, 2013), have become increasingly important. Using digital platforms such as personal computers are not only important for academic and vocational success later in life, they also provide a means for increasing authenticity and engagement in Elementary classroom writing tasks. The increased presence and functionality of digital communication technologies in the classroom introduce new possibilities for students to explore and create dynamic multimodal texts, including visual and auditory compositions, such as

pictures, music, hypertext, games, performance art, and video. Perhaps most importantly, 21st century literacies and digital communication technologies create unique opportunities for students to share their work with others, and to collaborate and engage in co-authorship across a variety of platforms.

Changing Literacies and Curricular Connections

This shift towards student-directed, process-based writing and 21st century literacies is reflected in B.C.'s revised K - 8 Language and Literacy curriculum document, which as of 2016 requires students to use texts to make connections to others, exchange perspectives and ideas, and use language in playful, exploratory ways to discover how it works (BC Ministry of Education, 2016). Curricular outcomes for reading and writing are now integrated with those for viewing and representing, as the definition of what constitutes a “text” expands from words on a page to a range of multimodal possibilities; the creation of which is facilitated by emerging digital technologies. According to the revised curriculum, contemporary ELA students must be able to write with standards that correspond to audience and purpose, but they must also be able to make meaning from, and compose through, a variety of multimodal texts, incorporate ideas and information from various sources, and design and develop texts for different purposes and audiences (BC Ministry of Education, 2016). I believe that the complexities of such learning standards, communication competencies, and Big Ideas can be supported through a combination of Writer’s Workshop and collaborative digital composition. In the next section, I discuss my personal teaching experience and selected observations as I introduced the Writer’s Workshop approach into my classrooms, to support my students’ literacy learning in relation to changing curricular expectations.

Instructional Context

I am currently in my sixth year of teaching, working part-time in two elementary schools in Greater Victoria. They are located in socio-economically diverse areas of the community. I teach intermediate students in grades 3 to 5, and although I teach French Immersion, I am typically responsible for English Language Arts.

I began implementing Writer's Workshop last year in both of my Grade 5 and Grade 4/5 classrooms. This was a change from my previous practice of providing writing prompts and expecting my students to produce responses. With this change in pedagogy, my students were selecting their own topics and writing for enjoyment, rather than simply to meet my criteria. As my students began to focus on the process of writing, and on expressing themselves freely and enthusiastically, I observed that two preferences emerged and remained consistent throughout the year in both classrooms. First, my students enthusiastically requested to write collaboratively with their friends. Second, my students often preferred to write using the classroom computers, incorporating images and even sound effects to add new levels of meaning to their work. We began the year writing and drawing in paper notebooks, but by the end of the year, Writer's Workshop had shifted almost entirely to the computers, and without enough PC's in my classroom, it was very common to see my students clustered with their writing partners around computers in different areas of the school, fully engaged in collaborative writing, designing multimodal pieces as slideshows or documents rich in images and visual enhancements, pleading for more time to continue their pieces even after long work periods, and producing some of the most complex and well-thought-out compositions I have ever seen from students at their age and grade level.

At the beginning of the year, I was uncertain how collaboration could result in improved individual expression. I granted permission for my students to write with partners from a position of curiosity, rather than confidence. I was also short on technological resources, and unsure whether or not granting permission to use our few computers would result in increased productivity, squabbling over computer time, or wasted periods spent in a state of constant distraction. But by allowing my students to explore these avenues, I was able to observe the value of both approaches. In fact, it seemed to me that if collaborative writing was indeed an effective educational tool, and allowing technology to change the way we conceptualize writing was conducive to creative and critical thinking, then perhaps these two seemingly disparate approaches could facilitate each other, and further increase the benefits of process-oriented writing instruction for all learners. I needed to understand more about the theoretical underpinnings of these approaches to better understand the students' experiences as writers and my own practice as an ELA teacher in contemporary times.

In the following and final section of this chapter, I provide an overview of my M Ed project, which investigates the ways in which Writer's Workshop and collaborative digital composition can be combined to support process-based writing in the 21st Century.

Project Overview

This project consists of a review of the literature regarding collaborative digital composition and Writer's Workshops, and a critical reflection on the benefits and practicalities of these approaches. In the literature review, I will investigate the ways in which collaborative writing and digital composition can support and enhance each other. In particular, I will examine the many facets of students' writing processes which can be expanded and enhanced through the use of digital technologies and texts which facilitate collaboration, such as blogs, wikis, and

Google Apps for Education. The project will conclude with a plan based on strategies drawn from the literature for the integration of collaborative digital composition into my own practice.

In Chapter 2, I will further discuss the ways in which technology-assisted collaboration has been shown to enhance both the revision and production stages of writing and representing. I will also explore effective implementations of these strategies in the classroom, based upon four studies including Boling et al. (2008), Yeh, (2014), Yi (2008), and Yim et al. (2014). In Chapter 3, I will reflect upon my own teaching practices, and formulate a plan for applying what I have discovered through the literature about technology-assisted collaboration in my own classroom. The goal of this project is to not only inform my own developing practice as an ELA teacher, but also to provide my students with the tools and opportunities that they need to become effective communicators and skilled writers.

Chapter 2

THEORETICAL FRAMEWORKS AND LITERATURE REVIEW

Emerging digital technologies such as personal computers can be used to enhance the practice of Elementary students' process-based, collaborative writing. In this chapter, I present the theoretical frameworks of Social-Constructivism and Multiliteracies which underpin the implementation of Writer's Workshop and collaborative digital composition. I will then describe some key ways in which these two theoretical frameworks have been put into practice in English Language Arts classrooms. Following that, I discuss the ways in which technology-assisted collaborative writing can boost literacy learners' engagement, encourage revision within the writing process, and impact the processes of co-authorship. Finally, I will present some possible directions for future research.

Theoretical Frameworks

Social-Constructivism

According to Vygotsky's theory of social-constructivism, students learn most effectively by engaging in authentic meaning-making processes (Smagorinsky, 2013). These processes occur when students discuss ideas in groups, sharing perspectives and pooling background knowledge not to find, but to construct, a true understanding of the material (Smagorinsky, 2013). The process of "talking things through" allows learners to discover and reshape what they know, and how they know it (Simpson et al., 2010). Collaboration is an indispensable tool for constructing meaning and building competencies because it allows learners to make use of the Zone of Proximal Development, wherein a student can acquire and develop skills by collaborating in a scaffolded manner with skilled peers or teachers (Smagorinsky, 2013). The use of language is instrumental to this process, as listening, paraphrasing, elaborating, questioning

and explaining are valuable tools for the development of higher-level conceptual and comprehension skills (Simpson et al., 2010). Opportunities to collaborate meaningfully with peers is also important, as students will use language to interact with each other in ways they would not with a teacher (Simpson et al., 2010). This way, students increase the range as well as the quality of their communication skills.

Collaboration has a greater effect, however, than building skills or knowledge. Vygotsky teaches us that thoughts and emotions are inextricably linked (Smagorinsky, 2013). By collaborating with peers, students experience feelings about their learning which inform their acquisition of skills moving forward (Smagorinsky, 2013). For example, a student whose ideas are praised or positively criticized by their classmates will be encouraged to increase their participation, take more risks, and engage more fully in discussions and collaborative meaning-making processes, whereas a student whose ideas are negatively criticized is likely to decrease their participation for fear of further disrespect or ridicule (Smagorinsky, 2013). Therefore, a positive, safe learning community, where all students can share their ideas without fear of derision, is necessary for quality learning to take place. The direct instruction of communication and discussion skills is also necessary to enable meaningful and productive group work (Simpson et al., 2010). Discussion which requires problem-solving skills, centred around literacy, can be beneficial to students' learning, communication, and thinking skills (Simpson et al., 2010). Empathizing, adopting various points of view, and developing a flexible imagination are all skills necessary for success in a Social-Constructivist learning context. They are also skills necessary for success in writing. The ability to talk, share ideas, and engage recklessly in the co-creation of rough drafts, is invaluable to the development of a student's writing process

(Spandel, 2013). In the age of 21st century literacy, opportunities to build and improve these skills are more important, and easier to provide, than ever before.

Multiliteracies

In 1996, the New London Group called for a fundamental re-imagining of the goals of 21st century education. Like Vygotsky, the New London Group (1996) emphasized the importance of group work and collaborative problem-solving. For success, they argued, today's students need to be able to engage in critical thinking to solve problems in meaningful contexts (New London Group, 1996). Their main focus, however, was on exploring the ways in which these meaningful learning processes could be facilitated through the use of multimodal texts and emerging technologies.

The New London Group's (1996) position necessitates a change in the way we conceptualize literacy. The New London Group's (1996) discussions gave rise to the term "Multiliteracies," defined as a pedagogy of literacy that is not limited to spoken or written language, but also incorporates meanings communicated through other modes, such as visual, auditory, and multimedia. A Multiliteracies pedagogy embraces plurality and multimodality, ensuring a place in the literacy classroom for non-linguistic, culturally diverse modes of communication (New London Group, 1996). Furthermore, in addition to traditional pencil and paper literacy and multiliteracy, to be successful in our modern educational and social landscape, students must develop competency with 21st century literacies. Because literacy itself is rooted in communication and culture, shifts in culture toward wider, more complex, more digital means of communication require similar shifts in literacy education (NCTE, 2013). 21st century literacies must emphasize dynamic, multimodal forms of communication that can cross cultural boundaries and facilitate global connectedness (NCTE, 2013). Students must be able to think critically while

creating, interpreting, and analyzing multimodal sources of information, while also navigating the ethical complexities inherent in this type of literacy (NCTE, 2013). These competencies are crucial for success in a globally-connected society, and they hinge on the acquisition of strong digital literacy skills.

Sylvester & Greenidge (2009) describe these skills in detail. “Technological literacy” refers the ability to use computers and other technological tools (Sylvester & Greenidge, 2009). “Visual literacy” refers to the ability to decode images, such as the icons on a toolbar or the illustrations in a book (Sylvester & Greenidge, 2009). “Media literacy” refers to the ability to interpret and create multimodal compositions, using print text, oral language, graphics, moving images and/or music to represent meaning (Sylvester & Greenidge, 2009). Finally, “information literacy” refers to the ability to find, evaluate, and synthesize information on a subject (Sylvester & Greenidge, 2009). Information literacy is crucial to a learner’s ability to use the internet as an effective research tool (Sylvester & Greenidge, 2009). Students must develop competency with all these forms of digital literacy in order to experience success both in and out of school (New London Group, 1996). Furthermore, a Multiliteracies pedagogy must not treat digital literacy as a simple matter of adding images to words. To be effective, Multiliteracies education must acknowledge the ways in which different modes of expression (audio, visual, etc.) can interact in complex ways to alter each others’ meaning or allow new possible meanings to emerge (Mills & Exley, 2014). New technologies create opportunities in the classroom to express ideas and create meanings that would simply not be possible through the medium of pencil and paper (Mills & Exley, 2014).

The potential of the internet and interactive information-sharing technologies to facilitate collaboration with others both nearby and around the world creates fascinating new possibilities

for literacy practices in the classroom (New London Group, 1996). The small group discussions favoured by Vygotsky can now be enhanced and expanded to platforms such as chat rooms, wikis, blogs, online forums, games, and cloud-based computing systems such as Google Apps for Education. Today's students must be able to work together in the classroom, but they must also be able to adapt their group work and learn how to collaborate through media other than speech, to learn to apply strategies of collaboration to the interpretation and creation of multimodal texts, to develop digital literacy skills, and to become 21st century problem-solvers (Mills & Exley, 2014). While these online collaborative strategies can be applied to class discussions, they can also be applied to the process of writing. Just as collaborative talk can lead to increased proficiency with paper and pencil writing (Spandel, 2013), collaborative technologies can similarly affect all stages of the creation of digital compositions for the better.

In the next section, I discuss practical considerations for implementing an English Language Arts program that is built upon the foundation of a Social-Constructivist and a Multiliteracies framework.

Theory to Practice

Social-Constructivism in the ELA classroom

English Language Arts, and writing in particular, is often considered to favour individual processes. However, a Social-Constructivist approach to ELA is both possible and valuable. Bush and Zuidema (2013) remind us that in a professional setting, most low-stakes writing, such as memos and personal correspondence, is done individually, but the most important, impactful writing (such as pieces for public consumption, pieces which discuss sensitive topics, or pieces with a financial stake, such as grant applications), tends to be the work of a team of writers, sharing ideas, evaluating each other's contributions and offering meaningful feedback to ensure

the quality of the finished product (Bush & Zuidema, 2013). As an important purpose of schooling is to prepare students for life after graduation (New London Group, 1996), it is vital that learners acquire the skills in school to compose collaboratively.

Collaborative writing, Kittle & Hicks (2009) remind us, does not refer to group projects wherein each participant completes an individual section which is later compiled by an editor into a more-or-less cohesive paper. Nor does true collaboration involve multiple participants submitting individual creative pieces to be placed within a larger work that may share a common vision (such as a book of poetry or a zine), while still allowing each participant unilateral control over their own contributions (Kittle & Hicks, 2009). Collaborative writing requires co-ownership and co-authorship, such that each participant shares an equal stake in the creation, revision, and presentation of the entire text (Kittle & Hicks, 2009). A social-constructivist approach to writing also requires a shift in mindset from the teacher as the holder of knowledge to the learners as co-constructors of knowledge (Mills & Exley, 2014). Allowing students choice and control over what to produce is a crucial part of this shift (Mills & Exley, 2014). The beauty of collaborative writing is that it allows a synergized group to create a text that no individual member could have produced on their own (Kittle & Hicks, 2009).

Collaborative writing is beneficial for students in that it mimics the group writing dynamic of a professional setting, wherein each member has a stake in the outcome and has something of value to contribute (Bush & Zuidema, 2013). It also creates accountability for all group members and promotes discussion and critical thinking, as students must all be engaged in sharing ideas, evaluating ideas, and deciding collectively what good writing looks like, and what is needed to help their writing meet that standard (Bush & Zuidema, 2013). Discussion helps students to understand and explain the “why” and “how” of their writing choices, which is

crucial to developing strong writing skills (Bush & Zuidema, 2013). However, some students may resist the group writing process, possibly because they are not comfortable giving up control of their ideas to a team, or are not engaged (Bush & Zuidema, 2013). It is important to ensure that group writing projects are planned thoroughly, that due dates are clear, that larger projects are easily broken down into a series of smaller accomplishments, that students can select an engaging topic, and that there is accountability for all students, such as regular check-ins with the teacher or self-assessments performed afterwards in which students reflect on their specific contributions (Bush & Zuidema, 2013). However, teachers must not attempt to simply fit collaborative structures into their traditional understandings of assessment and the learner-teacher relationship. Some flexibility on the teacher's part is necessary as the social, hierarchical order of the classroom must be disrupted in order for learning to become student-driven (Mills & Exley, 2014). Teachers must find a balance between holding students accountable for their contributions, and relinquishing the power to direct or control those contributions to the students themselves (Mills & Exley, 2014). Teachers must also acknowledge that some students' lack of comfort with collaborative writing is the result of their personal preferences, and while collaborative writing is a valuable skill and tool, it is not intended to replace individual writing (Elola & Oskoz, 2010). Teachers must remember the value of individual writing as well: It allows students to hone their unique authorial voices and express personal ideas, which is not always possible when writing with a group (Elola & Oskoz, 2010). A successful literacy program must be well-balanced and meet the needs of all developing writers (Spandel, 2013).

Multiliteracies in the ELA classroom

The ideas of the New London Group (1996) have transformed the practice of Language Arts instruction in modern schools. Many teachers have experienced success expanding their

English Language Arts curriculum to include digital literacy. Sylvester and Greenidge (2009) found a pedagogy of Multiliteracies to be particularly effective at engaging writers who struggle. Typically, reluctant writers either have a difficult time getting started, write profusely but are disinclined to revise their pieces with a critical eye, or else plough ahead so enthusiastically with their ideas that they neglect to include details and information crucial to the readers' understanding (Sylvester & Greenidge, 2009). Shifting the classroom focus towards digital storytelling, where instead of simply writing, students are engaged in creating multimodal compositions, can provide writers who struggle with increased confidence and motivation to engage in the process (Sylvester & Greenidge, 2009). For the current generation of students, those who have grown up using complex new technologies, it is common for students to have greater knowledge and confidence with technological platforms than teachers (Coskie & Hornof, 2013). The increased confidence that comes from shifting writing from pencil and paper (where reluctant writers struggle) to a digital platform where students can teach each other, or even teach the teacher, can allow writers who struggle to embrace their composing and storytelling skills from a new angle (Sylvester & Greenidge, 2009). The process of recording narration, and playing it back to ensure it is correct, can allow reluctant writers to enter an effective revision mindset, considering the overall effect of the narration compared to the effect they intend to create (Sylvester & Greenidge, 2009). The process of storyboarding can allow any missing details to become clear (Sylvester & Greenidge, 2009). The opportunity for students to create their own images to insert into their digital stories allows reluctant writers to illustrate their meanings precisely as intended (Sylvester & Greenidge, 2009). Transforming writing from a pen-and-paper endeavor to the digital sphere can help students re-evaluate what writing means to them and what role the communication of ideas plays in their lives, positively affecting their

attitudes towards school-based literacy (McGrail & Davis, 2010). Digital literacy introduces a new possibility as well: that of publishing one's work online to a larger audience. Awareness of an authentic audience has been shown to increase student engagement and encourage meaningful revision (Sylvester & Greenidge, 2009; Olthouse & Miller, 2012).

New technologies that make 21st century literacies possible can be quite complex, and many teachers have a difficult time learning the features of new programs for themselves (Coskie & Hornof, 2013). Additionally, teachers may have trouble teaching lessons in other content areas when technology is in use. Such lessons can easily become lessons about technology and its functions, rather than the intended subject (Mills & Exley, 2014). Coskie and Hornof (2013) recommend strategies for the integration of technology into the classroom. They suggest beginning a typical classroom activity, such as creating a piece of writing, using a technological platform, and interrupting the task for a short three-minute mini-lesson on one function of the program in use. Gradually, students will accumulate a wide range of skills in many small, manageable steps (Coskie & Hornof, 2013). Students who use technology in their everyday lives can be a valuable resource, as the skills learned in mini-lessons can be written on a chart alongside the names of the students who have mastered these techniques, creating a bank of skills and peer-helpers who can assist other students in learning how to make proper use of their programs (Coskie & Hornof, 2013). This technique of using students as technology experts to increase engagement and the dissemination of skills is also recommended by Boling et al. (2008) and Mills & Exley (2014).

Howsoever we decide to implement these changes to our classrooms, it is imperative that we do not allow ourselves to hand off the majority of the work to our students, leaving it to them to direct and instruct the usage of these new platforms. It has been established that the presence

alone of technology is not enough to effect meaningful change to the learning occurring in schools (Yim et al., 2014; Kittle & Hicks, 2009). Teachers must be familiar with the capabilities of any program they intend to use in the classroom, so they can verify that their students are using it to its full potential (Coskie & Hornof, 2013). Teachers must also research and formulate strategies for integrating technology into the classroom, as a purposeful and thoughtful usage of technology by teachers is the key to maximizing the benefits to student learning (Yim et al., 2014). Furthermore, digital literacy requires a shift in thinking, the adoption of a new educational mindset that values collaboration and innovation, and sees the educational possibilities created by technologies, not simply the tasks where a pencil could be replaced by a keyboard (Kittle & Hicks, 2009; Mills & Exley, 2014).

The following section describes, through the research literature, the potential benefits and challenges of integrating technology-facilitated collaborative writing into the Language Arts classroom. This impact is considered in relation to the areas of: learner engagement, revision, and the processes of co-authorship.

Learner Engagement

Collaborative writing and 21st century literacies are, individually, techniques that can boost learner engagement (Mills & Exley, 2014). One of the many benefits of bringing collaborative writing into the online sphere is increased access to writing communities (Olthouse & Miller, 2012). Youth-oriented writing communities allow learners to network with other readers and writers with similar interests and ability levels (Olthouse & Miller, 2012). Online writing communities provide a supportive peer group to learners, the presence of which can be a valuable tool for increasing learner engagement (Jones, 2015). Engaging with other students either inside or beyond the learner's peer group provides the learner with an authentic audience

for their pieces and allows the learner to begin to see their writing as a creative contribution to a larger community, rather than a series of isolated pieces created solely to be graded by a teacher (Jones, 2015; Olthouse & Miller, 2012). An authentic audience for whom the learner is writing encourages a mental shift towards writing as a form of individual expression, which results in increased engagement in the process of writing (Olthouse & Miller, 2012) because it mirrors the types of writing in which students willingly engage outside the classroom for enjoyment (Jones, 2015). Online writing communities also encourage the kind of modeling of professional authors that is integral to process-focused writing (Spandel, 2013), as learners begin living the experience of a beginning author, seeking a readership and meaningful feedback to improve their skills (Olthouse & Miller, 2012).

Harnessing the power of extracurricular literacy activities to boost learner engagement in the classroom is an avenue worth exploring. Yi (2008), as part of a research project to explore the out-of-school literacy practices of adolescent Korean immigrants in a Midwestern American city, discovered that many of her participants were enthusiastic contributors to a website dedicated to relay writing. Teenagers, those typically stereotyped to be disinterested in reading and writing outside of school, were dedicating their personal time to creating complex novels through a process of collaborative writing (Yi, 2008). While it may seem that relay writing (that is, writing in which each participant takes a turn at contributing a section to a larger cohesive work), might not meet Kittle & Hicks' (2009) standard for genuinely collaborative writing, Yi (2008) found that online relay writing is in fact highly collaborative. Participants posted their sections for the entire site community to read and comment upon, and the feedback and discussions of the other members contributed to the direction in which the next author would take the piece (Yi, 2008). The participants helped each other to acquire and hone writing skills in

a supportive environment that was created and moderated exclusively by the students themselves, making it an authentic student-driven learning experience, happening outside the bounds of the schoolyard (Olthouse & Miller, 2012; Yi, 2008). By expanding our Language Arts pedagogy to make use of technology-based collaborative writing, we are able to foster this kind of valuable learner engagement inside the classroom.

Boling et al. (2008) were able to observe this when their American students wrote a blog to share with a class in the Philippines. The global connectedness the internet provided coupled with the authentic audience of international peers eager to learn about life in Massachusetts bolstered engagement and participation, as the students began creating podcasts, videos and pictures to send to their international correspondents (Boling et al., 2008). In addition to sending compositions, they also received information from their audience: multimodal blog entries designed to provide a glimpse of life in a new and unfamiliar part of the world (Boling et al., 2008). As the New London Group (1996) predicted, the changing technologies of our age have connected learners and citizens all over the globe, and Boling et al.'s (2008) students were internally motivated to work together to engage in authentic communication, to make connections, and to craft their compositions with care for how their messages would be received. They also increased engagement by utilising Coskie & Hornof's (2013) strategy of assigning some students, often those who were otherwise reluctant or disengaged writers, to act as technology experts, teaching other students how to use the new digital tools, thereby ensuring that all students had an active role to play in the composition of these multimodal communiqués (Boling et al., 2008).

Tools such as blogs, wikis, and Google Docs have the potential to transform classroom literacy practices by connecting students to a wider, authentic audience, which boosts learner

engagement and inspires students to not only consider carefully how their writing might be received by an audience, but also to read others' blog posts with an active, critical eye, searching for opportunities to engage in discussion, ask questions, and provide thoughtful responses (McGrail & Davis, 2010). Students' writing, when generated through and for a wiki or blog, demonstrates greater voice and more successful attempts at elaboration, transition, organization and playfulness, compared to the product-oriented writing in which they typically engage in class (McGrail & Davis, 2010). As well, blogging encourages students to reflect on their writing process, and take greater note of the ways in which their peers or online collaborators approach the craft of writing, seeking to imitate what others are doing well in their own contributions (McGrail & Davis, 2010).

Not all students are willing to engage in online collaborative writing, however. Some students may lack confidence in their skills as writers and feel anxious about being judged for contributions they perceive to be flawed (Yi, 2008). Others may feel reluctant to offer constructive criticism if they do not enjoy their peers' work (Yi, 2008). When students are building relationships as co-authors, they can also be reluctant to offer corrections or criticisms to partners or group members, as it may cause a disturbance to the establishment of trust and comfort within the group (Elola & Oskoz, 2010). These results indicate the importance of a safe and respectful learning environment, where risks are encouraged, mistakes are permitted, and growth can occur (Elola & Oskoz, 2010; Yi, 2008; Yim et al., 2014).

While digital literacies and a Writer's Workshop instructional model can increase learner engagement, we must always be cautious of the potential risks to effective learning and teaching that new strategies and technologies can pose. As Coskie and Hornof (2013) remind us, increased engagement can easily lead to "tech takeover." Bringing Writer's Workshop onto a

new platform can lead to a preoccupation with the features of the technology and a neglect of the process of composition (Coskie & Hornof, 2013). Without teacher vigilance, learners can easily become engaged to the point of distraction by the endless possibilities opened to them by new technology. For learner engagement to increase constructively, we must always seek a balance between the excitement of a new platform and the techniques it allows us to employ to transform and enhance our compositions (Coskie & Hornof, 2013). Our goal must be to teach students how to use technology strategically, purposefully, to improve their compositions (Coskie & Hornof, 2013). Coskie and Hornof (2013) recommend setting limits when allowing students time to explore the features of new programs, scaffolding the use of technology into the Writer's Workshop gradually, and conferencing with students about how they spend their time to ensure they are composing with a clear purpose. Having considered the impact of digital collaboration on students' engagement, I will now examine its impact on revision within the writing process.

The Revision Process

While learner engagement is critical in maximizing the learning experienced by our students, there are more specific processes involved in creating a successful composition which can be enhanced through the use of technology-based collaboration. Revision, for example, is often collaborative in nature. It is common in classrooms for peer editors to help students locate and fix mistakes. Unfortunately, many students struggle to identify areas of their work that need revision, and can be reluctant to make substantial changes once they perceive the writing to be "done" (Humphris, 2010). Individual revision and peer editing often result in little more than surface changes, such as the correction of spelling and punctuation errors (Elola & Oskoz, 2010; Humphris, 2010). As pen-and-paper writing tends to be an individual process, it is unsurprising that many students feel a strong sense of ownership over their pieces, and are resistant to making

fundamental alterations to their work (Humphris, 2010). However, for effective revision to take place, students must be willing to look at their pieces with a critical eye and imagine what a reader's experience of the text will be in order to ensure that their message is communicated effectively (Humphris, 2010; Olthouse & Miller, 2012). Humphris (2010) found that students revising with the help of "writing buddies" were required to articulate how and why they wanted to make alterations to a piece, which supported their growing understanding of the revision process. When learners share their writing, or even their ideas, they find themselves defending those ideas, finding logical or structural errors in their thinking, and developing their unique authorial voice (Elola & Oskoz, 2010). Bringing the revision process into the digital world, however, can have further unexpected benefits for the emerging writer.

Yim et al. (2014) investigated the effects of Google Docs on students' writing and revising practices by studying the ELA programs of four suburban Colorado middle schools. The students observed were mostly White with mid-to-high socioeconomic status, with some ethnic and income diversity represented. The researchers observed, interviewed and surveyed teachers, literacy coaches, administrators, and students, at both the beginning and end of the year (Yim et al., 2014). 257 student participants voluntarily shared Google Docs created during the school year with the research team, and of those, 40 Docs were randomly selected for analysis of the feedback received. Students' writing and revision patterns were quantitatively analyzed along with feedback received, and teachers' and students' interviews and survey responses were qualitatively analysed using thematic coding (Yim et al., 2014).

Yim et al. (2014) discovered that, compared to pencil and paper or a typical word processor, students found organization and revision with Google Docs much easier. They also received and generated more, and higher quality, feedback from peers and teachers (Yim et al.,

2014). Students using Google Docs were more likely to make multiple substantial revisions to their work over time, in a manner more consistent with writing for secondary school or college, perhaps because the ability to track changes in a document helped students to feel reassured that previous drafts were not lost or discarded when changes were made (Yim et al., 2014).

Other aspects of collaborative technologies have been shown to contribute to students' increased success with revision. Collaboration, such as working together on a wiki, blog or Google Doc, helps students to become aware of their online audience, and engage in far more discussion, editing, and revision than is typical (Boling et al., 2008). The "sharing" functionality of Google Docs is conducive to bolstering students' confidence with revision, as they are able to share their Docs with precisely as many or as few other students as they wish, which allows students to manufacture their own safe and respectful co-operative spaces for sharing ideas, and increases willingness to make changes based on peer suggestions (Yim et al., 2014). When students collaborate during the revision process, they are less likely to focus on the particularities of spelling and grammar, which tends to be the focus of teacher-directed individual writing assignments, and more likely to focus attention on larger issues of structure, organization, and message: components that are essential for producing truly great writing (Elola & Oskoz, 2010). In fact, according to observations made by Elola & Oskoz (2010), collaborative groups tend to add fewer words to a second draft than writers working individually on similar tasks, but instead revise to increase the precision of their language and refine their message. Boling et al. (2008) also determined that students were highly internally motivated to make revisions in situations where they were composing a collective work, such as a class wiki, and when they were creating multimodal compositions to share with an authentic audience of their peers in another part of the world. When students are connected to an authentic audience of learners with similar interests

and abilities, they consider their pieces to be contributions to a creative community, rather than simply a classroom assignment (Jones, 2015). Students who receive feedback from an authentic audience of peer readers are more likely to take responses and suggestions to heart, and make real changes to improve their pieces once they are writing to communicate meaningfully rather than to complete a teacher-directed task (Olthouse & Miller, 2012).

While technology can be a powerful tool for enhancing the writing process, the teaching of useful revision strategies must not be overlooked. Students must be directly instructed how to provide quality feedback in order for the learning to be meaningful (Yim et al., 2014). While Yim et al.'s (2014) study demonstrates the benefits of collaborative technology to the revision process, the researchers note that the teachers involved did not encourage their students to engage in another crucial process for scaffolding the acquisition of writing skills: the technique of co-authorship.

Co-Authorship

Many teachers, when they think of the benefits technology can provide to the writing process, think primarily about the revision stage (Yeh, 2014). However, modern collaborative technologies can enhance the writing process in many fundamental ways. Yeh (2014), an English as a Foreign Language instructor at a Taiwanese University, provided 54 students, who had strong oral English skills but were not yet proficient in English writing, with EtherPad software. EtherPad is an online word processor with synchronous chat functionality. Yeh (2014) expected her students to use EtherPad to edit and revise their work together, but wanted to see how this collaborative software might influence other stages of the writing process. Yeh (2014) sorted her students into groups of three, each group determined to have approximately equal writing proficiency, assigned them an essay topic, collected their collaborative essays as well as

transcripts of their collaborative dialogues on EtherPad, and sorted the groups by the level of collaboration in which they engaged. Yeh (2014) then compared level of collaboration of each group to the fluency and accuracy of their essays.

Yeh (2014) discovered that her students did use EtherPad to collaborate during the revision process, but editing and revisions made up only 12% of the collaborative dialogues. The majority of these dialogues were dedicated to generating ideas (28%) and engaging in co-authorship (60%) (Yeh, 2014). Furthermore, groups with high and medium rates of collaboration consistently out-performed groups with low rates of collaboration on the assigned writing (Yeh, 2014). Although she does not address the possible effects of motivation and work ethic on her students' achievement levels and willingness to collaborate, Yeh (2014) does provide excerpts from her students' dialogues which demonstrate precisely how their collaborative exchanges resulted in more correct and fluent products.

It is clear from Yeh's (2014) findings that engaging in co-authorship, sharing ideas and making group decisions during the writing process, can be beneficial to all participants and facilitate a valuable and productive writing session, resulting in a stronger overall product than the individuals in the group would likely create working alone, confirming the assertions of Kittle & Hicks (2009). If knowledge, as Social-Constructivists believe, is produced through social interaction (Smagorinsky, 2013), then it stands to reason that providing students with technology that can expand the rate and scale of those interactions, while retaining their educational value, can also assist in the production of knowledge and the development of literacy skill (Elola & Oskoz, 2010). Students co-authoring a composition engage in dialogue about that composition; they are forced to explain and defend their ideas and choices, which leads to an increased focus on larger structural, organizational, and thematic issues within the composition

(Elola & Oskoz, 2010). Talking through these issues provides students an opportunity to articulate their thoughts and opinions on features of writing that students working individually, who typically focus on grammatical surface changes when revising (Humphris, 2010), do not tend to discuss (Elola & Oskoz, 2010). Furthermore, when applying the collaborative structure of writer's workshop to the use and production of non-fiction texts, Tracey & Headley (2013) noticed that as a result of collaborative discussions, their grade four students developed and used a "shared vocabulary." This bank of specific terminology, used to describe features of written work, grew out of the Writer's Workshop usage of mini-lessons and mentor texts (Tracy & Headley, 2013). A shared vocabulary allowed students to collaborate more freely, to communicate and share their ideas about what was and was not working effectively in their written pieces, and provided a useful tool for offering meaningful, constructive feedback (Tracy & Headley, 2013).

Writing collaboratively through the use of 21st century technology offers many opportunities and creates new possibilities for literacy learners, and it also opens up new avenues for teachers and researchers to discover. In the next section, I present possible directions for further research.

Implications for Future Research

While collaborative multimodal texts are changing the literacy landscape in many positive and exciting ways, this field of research is relatively new and still emerging, and there remains much to explore. For example, texts that are authored by more than one person and may be accessible online after their use in class are a new development in education. It remains to be seen how these texts will affect student collaboration or the educational landscape long-term. For one thing, there are questions of ownership to consider (Kittle & Hicks, 2009). If two or more

people co-author a text, who does it belong to? Do any group members have the right to make changes after it has been declared “finished?” What if one group member wants to share the text outside of the school context, and others do not? How will it be decided who does and does not have the right to publish a co-authored text? How will co-ownership of texts alter the social/interpersonal landscape of the classroom? Research into the ways these sticky issues of ownership will be navigated by educators and among group members will be interesting and valuable as collaborative products published online become increasingly widespread (Kittle & Hicks, 2009).

Collaborative writing also raises questions around assessment. There are several different schools of thought regarding appropriate ways to assess group projects, such as having students complete self-evaluations, or holding regular individual check-ins with group members (Bush & Zuidema, 2013), but collaborative writing is not a traditional group project. As teachers are becoming more familiar and comfortable with online, multimodal, collaborative compositions, some research into emerging assessment strategies will prove valuable for helping teachers plan lessons that encourage collaboration, that hold students accountable for their participation, and that support students in maximizing the learning they experience through their participation, and applying that learning to other areas of their schooling and their lives. Furthermore, expectations around assessment, particularly government-mandated standardised testing, can be instrumental in affecting teachers’ willingness to explore new technologies and new methods of learning that may or may not reflect their local government’s educational goals and values (Mills & Exley, 2014). Further research into developing clear and effective assessment strategies will, one hopes, help to increase productive communication and a common understanding of the value of

innovative Multiliteracies pedagogy between teachers and the government officials who set expectations for the ways in which student achievement is measured (Mills & Exley, 2014).

Conclusion

It is evident from the literature that the emergence of technologies which facilitate collaboration can have diverse benefits to the writing process. Students working collaboratively with new technology can be more engaged, and connect their pieces to an authentic audience (Boling et al., 2008). Through the use of online platforms, students are able to give and receive higher quality feedback during the revision process, make necessary substantial changes to their pieces with decreased reluctance (Yim et al, 2014), and help each other to generate ideas and engage in productive co-authorship (Yeh, 2014).

While these findings support the use of such technologies as beneficial, it is important to remember that the mere presence of technology in the classroom is not enough to instigate positive change (Yim et al., 2014). Teacher-education is the key to success in this venture. Teachers must plan purposefully using effective strategies for the integration of technology, or the potential of these programs will not be utilized (Mills & Exley, 2014). Teachers must also acknowledge that students today may have greater proficiency with technology than do they themselves, and approach the integration of technology with a willingness to cede some control to the students in order to learn what is possible (Boling et al., 2008). By embracing the changes occurring all over our technological landscape and bringing new programs into the classroom, we are able to engage students in processes of viewing and representing that are relevant to their life experiences and at-home practices (Jones, 2015). We are able to increase collaboration, and create an environment that is highly conducive to the development of 21st century literacy skills. Digital literacy is necessary for success in our modern world (New London Group, 1996), and if

we have the courage to make meaningful changes to our practices, we can provide students the tools they need to flourish.

The following chapter will present the final section of my project: a critical reflection on my integration of the technique of collaborative writing and the acquisition of digital literacy skills into my own English Language Arts program, and a plan to increase and improve this implementation.

Chapter 3

REFLECTION AND CLASSROOM PRACTICE

The Writer's Workshop model of literacy instruction and the inclusion of Multiliteracies and digital literacies in the English Language Arts program are two pedagogical approaches that effectively complement each other when combined in practice. In this chapter, I conclude this project by reflecting critically upon the implementation of these techniques as they have been applied in my classrooms. I then use my personal observations, as well as the body of literature I have examined, to formulate a strategy for implementing a theoretically-sound, educationally-beneficial writing and composing program, including collaborative writing and 21st century literacies, in my own classrooms. I will begin by strategizing the implementation of both the Social-Constructivist and Multiliteracies theoretical frameworks into the Writer's Workshop model of writing instruction. Finally, I will describe critical observations from my implementation of strategies to facilitate learner engagement, co-authorship, and revision techniques among my Writer's Workshop students through the use of 21st century literacies, and identify the next steps for my literacy program in each area.

Applying Theoretical Foundations

Social-Constructivism

In order to effectively construct knowledge, students must have the opportunity to collaborate, engage in discussion, share ideas, and solve authentic problems (Smagorinsky, 2013). The Writer's Workshop model of writing instruction creates opportunities for authenticity by engaging students in self-directed writing tasks powered by their own internal motivation (Spandel, 2013). Applying the technique of collaborative writing to the Writer's Workshop model incorporates into it the discussion, problem-solving, and meaning-making processes that

the Social-Constructivists view as necessary for effective learning to take place (Smagorinsky, 2013). In my own classrooms, I have witnessed the benefits of collaborative writing, as well as its pitfalls. When students are struggling to make their written pieces take shape, asking those students to discuss the problem with their peers often leads to increased engagement and, as Vygotsky suggested, a writing and learning process that is more meaningful (Smagorinsky, 2013). However, groundwork and supervision are required, as I have observed how easily students can pull each other off-topic when expectations are not clearly set, and the concept and structure of “group work” is not effectively defined. As well, when students are not engaged, collaborative tasks often do not result in productive, meaningful dialogue. In my experience, it is primarily lack of engagement and misunderstanding of expectations that can result in a failed, or minimally-beneficial, collaborative dialogue. Such dialogues can have significant consequences, especially when students act unkindly: from Vygotsky, we know that students who are disrespected or made to feel ashamed of their contributions not only do not benefit from the interaction, but are also less likely to participate in future collaborative sessions out of fear of ridicule (Smagorinsky, 2013). Therefore, when planning collaborative writing tasks, it is imperative that I walk a line between providing students the freedom to guide their own dialogues to increase engagement, meaningfulness, and productivity in tasks, and putting in place a structure of guidelines and expectations that firmly disallows unkind and disrespectful behaviour.

The Writer’s Workshop model of writing instruction is ideal for providing freedom and student-directed opportunities for engagement and meaningful discussions. To access the benefits of this approach, I will ensure that when Writer’s Workshop is taking place, students have time, space, and permission to talk about their ideas, share possibilities, debate multiple

possible directions for their pieces, and through collaboration, to build something together that is greater than what a single participant could achieve individually (Kittle & Hicks, 2009). Whether on computers, iPads, Chromebooks, or paper, the freedom to choose topics, write collaboratively with friends, talk through ideas, and share finished or in-progress pieces with others for meaningful constructive feedback, is essential for unlocking the Social-Constructivist benefits of the Writer's Workshop model. It is my intention, when conducting Writer's Workshop, to say "yes" as often as possible when students raise questions about new directions or formats their writing may explore. While in the past I have been wary of giving students too much freedom in their writing, out of fear that they would stray too far from my set criteria, since implementing Writer's Workshop I have begun to approach writing instruction with an open mind and an eagerness to see my students experiment with new formats and directions, and discover as individuals what techniques and strategies do and do not work for them. The increase in energy, engagement, and productivity among my students since I have adopted this new mindset is heartening. As we move Writer's Workshop into new and different technological platforms, I look forward to the unexplored possibilities my students and I will be able to discover together.

While embracing a philosophy of "try it and see," to encourage experimentation and discovery in the Writer's Workshop, I must also set firm boundaries to ensure the educational and emotional safety of my students. I know from experience that students can be vocal about their like or dislike for others' ideas, and that the excitement of the endeavour can lead to group leaders barrelling ahead and steamrolling over certain group members' feelings. It will take patient groundwork to help my students to think before they speak, and consider how their comments will sound to the person receiving them. Not only will direct instruction of conversational tactics for disagreeing or offering criticism respectfully ("I have some questions

about that idea,” “I have another idea,” “I’m not sure that idea will work best for this story,” etc.) result in more productive and constructive discussions, but it will also help students develop awareness of audience in their speaking, which could translate to a similar awareness when writing. Students must be coached on how to respond to each other’s work in a constructive manner, with abusive or disrespectful comments strictly forbidden. In addition, students working together must be held accountable for their use of class time in a way that will encourage productivity without stifling creativity. I will conference often with my students to check in about their writing, letting them know that I am here to help them, but that I am also interested in what they are doing and watching their progress as they find their way through their pieces. This is a small but important method of communicating to students that unstructured Writer’s Workshop time is not simply a free period where anything goes, but an opportunity to explore new avenues in writing with a teacher who is supportive, rather than controlling.

Multiliteracies

Communication through means other than written language is a vital part of any literacy program (New London Group, 1996). I have continually striven to provide my students with opportunities to explore the relationship between words and pictures, and to represent ideas through images, physicality, and song. However, the rise of technology in 21st Century classrooms brings opportunities to engage students in a range of new and previously unexplored literacy practices. Unfortunately, these opportunities can easily be squandered. In order for valuable learning to occur, teachers must integrate technology into the classroom with a purposeful strategy, and a clear idea of what technology is able to do and how it might expand the opportunities for students beyond simply learning to type (Yim et al., 2014). Therefore, my plan to integrate technology into my classroom effectively is explored in this section.

Integrating technology into the classroom must not be as simple as using a word processor to perform a task previously achieved through pencil and paper (Kittle & Hicks, 2009; Mills & Exley, 2014). Nor is digital literacy a straightforward matter of inserting pictures into Word documents (Mills & Exley, 2014). 21st Century technologies allow for a range of meaning-making opportunities and complex interactions between modes. Google Docs, for example, is an effective word processor. However, its capabilities extend beyond use as a platform for students to type their work. Tools such as font, colour, and size of text allow writers to bring additional voice into their pieces. The share, highlight, and comment functionalities facilitate the sharing of ideas and feedback between students, and between students and teachers. The revision history tool ensures that no changes made to a document are ever truly lost, and all work is recoverable. Other tools allow the insertion of voice recordings and images. When iPads are introduced into the Writer's Workshop, possibilities expand further, as the camera allows for movie-making and editing, animation, and the use of photographs taken by the student, rather than a selection of stock images. These are only some examples of the technologies and capabilities finding a place in 21st century classrooms. However, these tools can be overwhelming when presented all at once. On the advice of Coskie & Hornof (2013) I have begun lessons in Writer's Workshop with a short introduction of one new feature of the technology we have begun using in the classroom. During the writing session, students will experiment with the new tool they have been shown, and at the end of the period, I select a few students who have demonstrated confidence with the tool (and who are willing and eager) and add them to a chart of "tech experts" posted in the classroom, as experts on that tool. For example, if my mini-lesson is on the topic of leaving comments on a Google Doc, I would seek out commenting experts and add them to the chart, indicating that anyone who is having

difficulty figuring out or remembering how to use the comment feature could ask those experts. I have made an effort to list a wide variety of experts, seeking out new volunteers for new features, rather than asking the same tech-savvy students to volunteer every time. Students who may seem more reluctant to participate, or to share their work, or who demonstrate lower self-confidence, make ideal “experts,” and taking on the mantle of the expert has increased engagement and enthusiastic participation by those students who may otherwise have felt uncertain or lacked the confidence to participate in Writer’s Workshop. My observations of this phenomenon support the assertions made by Coskie & Hornof (2013). The combination of mini-lessons and an expert chart has increased engagement and disseminated technological skills quite effectively in my classroom.

Moving forward, I am developing a clearer idea of how to promote Multiliteracies and digital literacy in my classroom. My schools will soon be receiving Chromebooks, and iPads are becoming more readily available for use by students. As the availability of technology increases, I intend to expand my mini-lessons to include a greater range of tools, such as the ability to record voice notes on Chromebooks, or use iMovie software on iPads. With the greater mobility these technologies provide, I hope to expand the Writer’s Workshop experience beyond the bounds of the classroom, allowing my students to gather (or even stage) images, videos, and sounds around and outside the school, providing opportunities to integrate a variety of modes into students’ compositions.

In the Writer’s Workshop, mentor texts are an important tool for demonstrating how writing techniques are used effectively by experts (Spandel, 2013). To facilitate a pedagogy of Multiliteracies, I will attempt to expand my collection of mentor texts to include multimodal compositions, utilising modes of video and audio, to demonstrate to my students that many of the

six traits of writing (Spandel, 2013) can be applied to modes other than the written word, and how modes can interact to alter each others' meanings. Through these methods, I will be able to ready my students to explore the complex and challenging compositions made possible by 21st century literacies and a Multiliteracies foundation.

In the following section, I will reflect critically upon the ways in which collaborative writing and the use of technology have been, and can be, used practically to increase learner engagement, and support processes of co-authorship and revision, in my classrooms.

Practical Applications

Learner Engagement

In order for meaningful growth to occur, students must be engaged and taking an active role in their learning (Olthouse & Miller, 2012). Authenticity of the writing task and audience have been shown to increase students' engagement in writing (Olthouse & Miller, 2012; Spandel, 2013). In my classrooms, I have observed how the Writer's Workshop model has increased both authenticity and engagement in our writing blocks. Since implementing the Writer's Workshop model, my students have enjoyed the freedom to choose their own topics and style of writing, or to branch out from written language and tell stories through the medium of comic books and nearly-wordless picture books. Crafting compositions based on their own individual strengths and desires has led to an observable atmosphere of excitement and passion in the classroom, and my students demonstrate eagerness to discuss their pieces, present, and show off their compositions to the class. My observations lead me to believe that the Writer's Workshop model has increased engagement in my writing classroom.

In the hopes of increasing that engagement, I recently helped my Grade 4/5 class to access Google Apps for Education (or GAFE), allowing my students to use the platform of

Google Docs to create, revise, and share their writing. As Writer's Workshop shifted to this new digital platform, I observed increased engagement, partially with the technology itself as my students were eager to use it, but also with the process of writing. My students taught each other the features of the program, with the help of the expert chart, and spent some time experimenting with what the platform could do, but they also used those features to share their writing with friends they trusted, provide constructive, motivational feedback to each other, and act as a meaningful audience to each other's work. My students seem to enjoy sharing their pieces and leaving feedback for each other using Google Docs. I have noticed that some students who were reluctant participants in Writer's Workshop when the writing took place mostly on paper, are now producing more complex and detailed pieces in a shorter timeframe. The act of sharing their Docs both with other students and the teacher has seemingly increased awareness of audience in many students, as they consider more carefully how their words will be seen by others before clicking the "share" button. I am pleased with the increased engagement I have observed since introducing my students to Google Apps for Education, however, I have noticed some areas of concern.

Coskie & Hornof (2013) warn of the "tech takeover" that can occur when students become more focused on playing with the many features of a new program than on the content of what they are creating. I have done my best to keep "tech takeover" to a minimum through the use of mini-lessons on different features, and frequent reminders and questions to my students about the purpose of their tasks. However, some of my students have found utilizing the capabilities of the program with purpose to be a challenging experience. I often see Docs shared with me for feedback that are peppered with comments by other students, many of which are irritating and nonsensical (such as strings of random letters) rather than constructive. Students

occasionally share Docs to their friends, granting edit privileges, only to find that their friends make changes to or delete part of their work against the author's will. Although previous drafts are generally recoverable, it has taken more groundwork than I expected to guide my students toward positive engagement with technology, and away from using the features of the program for their own amusement, derailing each other's writing process.

It is also concerning to me that GAFE allows students to create and share Docs, comments, and emails that I am unable to see unless they are shared with me directly. This could allow my students to engage in cyberbullying (exchanging derogatory or unkind messages) behind my back. I accept that media as simple as paper and pencil allow students to engage in bullying, and that fostering a kind and accepting atmosphere, and establishing expectations of respect in the classroom, are the main strategies to prevent bullying. However, the fact that I have specifically provided my students with a communication tool that can be used at home and school, the usage of which can be made invisible to me, fosters in me a sense of personal responsibility to see that this tool is used appropriately. I do not like to put my students in the position of policing each other, but once I have established my rules and expectations for the use of this tool, unfortunately, I must rely on my students to come to me privately and inform me if they observe inappropriate engagement with GAFE, as I will have no way of knowing how this educational tool might be used outside my classroom to create correspondence to which I am not privy. This release of control has been a difficult and unexpected adjustment for me. Fortunately, incidences of my students using their GAFE accounts in a manner that is deliberately cruel and inappropriate have been minimal (though not nonexistent). However, I will remain as vigilant as I am able in order to ensure that the increased engagement and enthusiasm resulting from the

usage of GAFE does not spur certain students into hastily sending messages without first considering the feelings of the recipients.

Moving forward, I intend to harness the boost in engagement caused by students' connection to an authentic audience by seeking out audiences beyond the classroom. By connecting my students to classes in other parts of the world, as Boling et al. (2008) did, or with the community at large, as Yi (2008) did, I hope to refocus my students' efforts on their writing, how it is purposely shaped for their audience, and how it is received by that audience.

Considering an audience beyond immediate classmates may help to boost positive engagement and direct attention to the writing itself, separate from friendships and interpersonal relationships within the classroom.

The Revision Process

While the presence of an authentic audience is useful for helping students to engage meaningfully in the process of writing, it has also been shown to have a positive effect on the revision process (Yim et al., 2014). Revision is, in my experience, one of the most challenging phases of writing in which to engage students. Many of my students take time to carefully craft their compositions, only to read over what they have written with a disappointing blindness to errors and structural problems, changing almost nothing before submitting their piece for assessment. When writing collaboratively, as Humphris (2010) observed, students are more likely to engage in revision more seriously, since they have to explain and defend their ideas to their writing partners. My students, writing together, do seem to discuss the crafting of their pieces in greater depth, as they try out new ideas and suggest new directions for their pieces. Moving through my classroom during Writer's Workshop, I can hear many such conversations regarding vocabulary, structure, and pacing of the writing. My students seem willing to engage

in revision during writing, but are more reluctant to continue revising after the piece has arrived at a conclusion. As the presence of an authentic audience can help writers to bend their own thinking and see their pieces from a new perspective, I intend moving forward to increasingly encourage my students to share their pieces among themselves, to other groups who had no hand in authoring the work, in order to receive the valuable feedback they need in order to make the more substantive revisions they are sometimes unable or unwilling to identify after they have declared a piece to be “done.” I expect that continuing to model the post-writing revision process in my own pieces, inviting student participation, will be beneficial to my students’ revision processes as well. Direct instruction of revision processes, after all, is a vital component of the Writer’s Workshop (Spandel, 2013), and to the acquisition of skills (Yim et al., 2014).

Another key strategy that is helping to improve revision in my Writer’s Workshop is the usage of Google Apps for Education, a collaborative digital cloud-based platform for writing. In addition to helping increase learner engagement, GAFE allows students to share their pieces with each other, and to seek and receive peer feedback to help with the revision process. I introduced this platform to the Writer’s Workshop, hoping to see the changes that Yim et al. (2014) observed in the quality of peer feedback provided, and in the willingness of my students to make more substantive revisions, secure in the knowledge that no previous draft is ever truly lost. What I have noticed since moving my young writers onto GAFE is that the quantity of feedback provided has increased, and in many cases, the quality, although many students are still developing the maturity to use this tool effectively. Students who have shared their Docs with others for feedback may have to wade through nonsense comments in order to find the few that are truly useful. Teaching students how to control their impulses and ensure that feedback they provide is purposeful and valuable to the recipient is every bit as important as teaching the

process of revision itself. While GAFE has opened doors for communication and revision, it has also presented challenges in the classroom, especially at the elementary level, of the sort that teachers must be prepared to navigate. GAFE can make writing fun and engaging, which can sometimes increase hyperactivity and off-task behaviour. Vigilance on the part of the teacher, as well as encouragement to remain focused on the purpose of the task, is the key to ensuring that the benefits of platforms such as GAFE to the revision process are maximized.

While I have seen some improvement to feedback and revision through the use of GAFE, I have so far only been able to offer my students access to GAFE through desktop computers, many of which are not equipped with microphones or headphones to facilitate the use of audio content, due to the limitations of the technology available at my school. As the access to technology in my school improves, I intend to have my students create their compositions on Chromebooks, which have built-in microphones, cameras, and speakers. This technological upgrade will allow me to use more strategies with my class to improve revision and feedback. For example, when we have the appropriate equipment, I intend to require my students to record a brief audio self-assessment of their writing when they submit a piece to me through Google Docs. The act of articulating the piece's strengths, areas for improvement, and observations about the writing process, should continue to engage my students in their learning while also promoting awareness of audience, critical reflection, and the development of oracy skills. I am hopeful that continued reflection and consideration of an audience will continue to help my students to engage more effectively in the process of revision.

Of course, providing technology and opportunities for collaboration in order to exchange feedback is not all that is required for valuable learning to take place. Having opportunities to easily offer feedback to peers is worthless if the students are unaware of what makes feedback

valuable, or ignorant of what constructive criticism looks like. Students must learn not only how to receive feedback and incorporate suggestions into their writing; they must also learn how to give feedback in a way that is respectful, thoughtful, and constructive. Direct instruction of methods for offering comments, posing questions, or making suggestions, that will help the recipient feel encouraged to improve their writing, is essential for the development of the revision process (Spandel, 2013). This is something I will continue to foster in my own classrooms.

Co-Authorship

While revision after a piece has been completed remains a challenge for my students, the usage of GAFE in my Writer's Workshop has more easily facilitated the technique of co-authorship. Sharing computers, my students are often collaborating: discussing ideas, structure, and directions of their pieces. Writing with friends, not simply providing feedback on each other's pieces, but truly writing together, has caused my students to become engaged in presenting and defending their ideas to each other as each participant feels responsible for helping to shape the composition into its finished form. While Elola & Oskoz (2010) predict that moving collaborative interactions to a technological platform can expand and increase those interactions, I have found that my students tend to collaborate more effectively when they are discussing their pieces face to face. My students have access to computers both inside the classroom and in the library across the hall. Therefore, during Writer's Workshop, it can take time for me to circulate through both work areas and observe my students' processes. I often observe pairs or trios of students clustered around a computer talking animatedly about their compositions. I also occasionally observe two students sitting at computers in different work areas, each with the same Google Doc open in front of them, attempting to make changes and

additions simultaneously with each other. As they are doing this outside the range where verbal communication is possible, there is sometimes confusion, or a slow process of typing brief comments to each other to confirm that their changes are acceptable. This silent collaboration, a reduction in communication, is not the intended result of writing collaboratively with GAFE. I see this as another example of “tech takeover” (Coskie & Hornof, 2013), in which the novelty of performing a task on a new technological platform overshadows the more efficient, and more educationally valuable strategy for completing that task. When I observe this silent collaboration taking place, I ask the students to move close together, or share a computer with only one copy of the Doc open, so that both participants must discuss their ideas together before making additions. I would expect, as my students mature and their typing skills develop, that the ability programs such as GAFE provide to work collaboratively across some distance, such as on out-of-class assignments, will become more meaningful. At this time, in my classroom, the main benefit I see to Writer’s Workshop from GAFE is the increased multimodality of texts, the quality and quantity of feedback provided, and the increased engagement leading to more productive collaboration in class.

The use of GAFE in the Writer’s Workshop has been a valuable starting point, which has given me some ideas about the benefits and areas of concern inherent in using this sort of technology in the classroom. However, there is much more that I intend to do to encourage co-authorship on digital platforms. Blogs and wikis are an example of a digital platform that fosters a different kind of co-authorship. Instead of partners working together on a piece of writing, and discussing it as they go, a class blog or wiki could function as one large piece of writing to which everyone in the class contributes. As my class and I continue on our exploration of the technologies available, I would like to create a class blog to promote discussion of complex

questions. While discussion in class is beneficial to the acquisition of language skills (Simpson et al., 2010), I would like to see how an interactive written discussion could help my students to express their ideas and opinions in writing. The skills involved in reading one person's opinion, considering it, and crafting a response, may be valuable to the acquisition of writing skills. The ability to comment, reply, and otherwise navigate a blog, is a valuable component of digital literacy (Sylvester & Greenidge, 2009). Similarly, a wiki could serve as a repository of information on a given subject, to which each class member could contribute. With all students sharing the responsibility for providing information, organizing and structuring it, and designing the presentation of the wiki, a broader sense of co-authorship and cooperation may develop. I would be interested to see how these techniques would impact my students' writing and composing. I wonder, as well, if a blog or wiki might have been a better tool to use with my class before introducing them to GAFE. Perhaps the more limited structure of a wiki or blog could have served as an introduction to digital communication and collaboration before making the leap into the much broader and less structured communicative capabilities of GAFE. I wonder if such an incremental adjustment to digital co-authorship could have prevented some of the off-task behaviour I have observed when using GAFE in the classroom. I look forward to exploring this idea with my next group of learners.

In addition to the blogs, wikis, and Docs that foster written communication, I have yet to expand my students' tools and techniques for creating multimodal compositions. As my students have created compelling, entertaining, and well-structured pieces of writing all year in Writer's Workshop, I would love to take advantage of the iPads my school has recently received to expand my students' composing skills into an audio/visual medium. Using apps such as the camera and iMovie, my students could transform their written pieces into live-action films, or

use photos they have taken or drawings they have done to create a movie out of still images with narration and music. Groups would have to work together to plan, storyboard, film, and record audio for their pieces, applying their co-authorship skills to a wider range of modes of expression. I believe my students will find this to be engaging, exciting, challenging, and of great benefit to their development as multiliterate learners.

Conclusion

I have taken some positive steps to incorporate both the Social-Constructivist and Multiliteracies framework into my Writer's Workshop, providing my students with opportunities to use technology in collaboration to improve their writing and composing skills. Through this implementation, I have observed the benefits of these techniques when applied through the use of Google Apps for Education, as well as areas requiring more strategic support for my students. While GAFE has been a valuable starting point, I look forward to introducing more technological platforms into my classroom, challenging my students to compose together through a greater number of modes, and supporting my students as they gain increased competence with writing and composing through digital platforms. The body of literature available on these topics has provided me with new information and perspectives to help guide my ongoing implementation of a Writer's Workshop program which promotes 21st century literacies, and encourages collaboration. Through ongoing research and critical reflection, I intend to provide my students with the tools and support they need to build skill and confidence with collaborative digital compositions, and to grow as learners in our increasingly digital 21st century schools.

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