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ON BECOMING A DIGITAL LITERACY MENTOR:
SELF-DETERMINATION AND MEDIA PRODUCTION IN ELEMENTARY
EDUCATION

BY
YONTY FRIESEM

A DISSERTATION SUBMITTED IN PARTIAL FULLFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN
EDUCATION

UNIVERSITY OF RHODE ISLAND
AND
RHODE ISLAND COLLEGE
2015

DOCTOR OF PHILOSOPHY DISSERTATION

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2015

ABSTARCT

Today, anyone with a smartphone has access to a whole suite of tools to create video and multimedia that can be instantly and widely shared. While research shows the cognitive, social, and emotional benefits of media production on students' learning, less is known about how media production is integrated into the context of elementary education and only a few schools have begun to experiment with video production as a means to promote literacy and learning. This research explored some effects of a two-year initiative to integrate digital literacy in a suburban public elementary school. For a period of six months, the researcher interviewed and observed four full time teachers and four support team members and examined students' work artifacts, teachers' tweets, collecting survey data from the entire faculty. Multiple case studies reveal the sequential process used by teachers to integrate media production into existing lessons through active collaboration with other faculty and support team members. One Grade 4 teacher used media production to modify a history assignment as she learned to give more control to her students. Another set of Grade 4 co-teachers supported each other to balance the playfulness of creating a videotaped book report with a more systematic approach to addressing educational standards. A Grade 2 teacher worked with the school's literacy coach in the development and implementation of a science unit as students used media production to advocate for environmental sustainability. In order to embrace this new pedagogy, all four teachers went through a set of hierarchical stages starting with building trust and relatedness with colleagues; developing their sense of mastery and competence; and becoming confident and reassured to use media production as a form of instruction that includes both play and empowerment. By reflecting on and

analyzing their ability to shift their instructional strategies during the course of the year, they became digital literacy mentors. This research has implications for those interested in providing a holistic model of teacher professional development within an elementary school context, and demonstrates the value of supporting teachers' intrinsic motivation to meet the needs of their young learners.

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Many people supported my journey from high school media literacy teacher in Israel to doctoral candidate at the University of Rhode Island and Rhode Island College. I am deeply grateful to my committee members, the staff at Ocean Elementary, Media Education Lab members, my two cohorts, and of course my friends and family. All of them supported me as I struggled to find my voice as a media literacy scholar, conceptualize my ideas, and write in English.

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The staff at Ocean Elementary modeled how to use media production in a public school. Their work made my work meaningful. George, the media library specialist invited me to the school and became a supportive colleague. Charlotte, the literacy coach was my guide to teaching at the elementary level. She helped me learn how to incorporate technology into the elementary school classroom. Sarah, Isabella, Sophia, Rachel, and Barbara have been an inspiration to watch. I learned so much from documenting their successful integration of media production throughout the daily struggle of public school teachers. Grace, the math coach, Abbie, the behavior specialist, and Diana, the school principal gave an enormous support to the staff and the research. Furthermore, they modeled by how their own work using media production can expand from literacy and social science to math, positive behavior reinforcement, and administration use.

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started my life as a full time academic. I am forever grateful for all your feedback and for enduring me in my craziest moments of the last four years. You have been my motivator to be a better academic and most importantly a better human being.

DEDICATION

This work is dedicated to Renee Hobbs.

I have so many acknowledgements for your mentorship in the years since we first corresponded. Our relationship went beyond major advisor and advisee. Our first Skype talk and my visit to the Media Education Lab at Temple University in Philadelphia convinced me that I had found my home. Your endless support and push for academic excellence motivated me to produce a deep and meaningful study that will benefit educators and scholars. I cannot thank you enough for the infinite hours of work, review, feedback, rewriting, and conversations. The empathy and respect you infuse into the Socratic method allowed me to feel like a colleague and taught me the meaning of mentorship.

Your friendship was the most important part of my journey. Your emotional intelligence steadied me through the trials and tribulations of graduate school. Your support helped me to keep my head above the steaming water. As I begin my academic life teaching, researching, and learning more about media literacy, I dedicate this work to you. Yours is the model I will follow as I try to build an academic life that makes a meaningful contribution to the wider community of educators and especially students.

Thank you for who you are ☺

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Chapter 1 - Introduction

“You know, doing these little videos are nice and everything, but we really need to let the teachers teach, don’t you think?” (Elementary school principal in personal communication, 2014)

This was not the first or last time I heard a comment like this, where school administrators looked skeptically upon student video production as a playful and engaging activity that is non-educational and may even undermine learning. In recent years, there has been a growing body of literature that has showcased how media production enhances learning of young children (Bazalgette, 2010; Burn & Durran, 2007; Burn, 2009; Donohue, 2015; Guernsey, 2014; Hobbs & Moore, 2013; March, 2006). While research has shown that teachers are familiar with media literacy concepts, they do not apply it in their classrooms (Goetze, Brown, & Schwarz, 2005; Schmidt, 2013; Yates, 1997). This researcher-practitioner gap has been a problem in education for many years (Broekkamp & van Hout-Wolters, 2007). In addition, little is known about the role of professional development in integrating media production across grade levels and subject matters, especially in the public elementary school system.

Media are powerful tools that support students’ cognitive, social, and emotional learning (Gardner & Jenkins, 2011). With this basic assumption, I started my journey as an educator more than eighteen years ago to later become a researcher. In today’s digital world, students can connect in- and out-of-school content to enhance their learning (Ito et al., 2013). Guided media production, especially of videos, can promote students’ engagement (Haynes & Tanner, 2013; Montgomery,

2014), collaboration (Bass & Bandy, 2010; Rheingold, 2008), identity (Bailey, 2011; Buckingham, 2008), critical thinking (Benerjee & Greene, 2006; Denski, 1991), creativity (Halverson, 2010; Niesyto, Buckingham, & Fisherkeller, 2003), positive behavior (Kennedy & Swain-Bradway; Stephenson, 2008), and problem solving (Goodman, 2003). There are also limitations and challenges to bringing media production into the classroom, which is an issue that I will address in the description of the findings. The goal of this dissertation is to examine how, with all the challenges of producing media in a classroom at a US public elementary school, teachers and specialists collaborated to discover the value of media production in their classes.

Purpose of the Study

The goal of this study is to explore the integration of media production in K through 4th grade classrooms. By addressing teachers' motivations, instructional practices, and school support, this study (a) looks at the diverse reasons for teachers' using media production in their classrooms, (b) identifies a variety of practices for implementing media production in one elementary school, and (c) documents the work of a professional development team. Mapping teachers' motivations for using digital media and technology, their instructional practices, and the types of available school support helps determine how to develop professional development programs that best support teachers' media production implementation.

For the purpose of highlighting the value of media production in elementary education, we must address three challenges in the literature. First, most media production studies have focused on students' learning while teachers' motivations

have been assumed and their practices were only inferred. Second, often scholars drew conclusions from one ethnographic study or one action research of a particular media production practice, omitting other types of practices. Third, whereas much has been written about technological integration, little is known about media-production integration, especially in elementary education.

Background

Media production is a specific activity that uses technology in order to promote media literacy skills (access, analyze, create, reflect, and act) in educational settings (Hobbs, 2010). As we increasingly use digital devices in our daily life, schools should prepare students to be digital- and media-literate for diverse aspects of their future careers and lives (Davies, Fidler, & Gorbis, 2011; Jenkins, Clinton, Purushotma, Robison, & Weigel, 2006). As digital devices and software become cheaper and more accessible, media production can be conceptualized beyond digital integration, blended learning, or media arts education. Coming from a media literacy approach, media production is more than just educational technology where digital devices such as Promethean boards, laptop computers, and iPads replace blackboards, books, and notebooks. Using digital devices and online applications can promote many competencies to become a digital- and media-literate person. Throughout this dissertation, I refer to a variety of generally free and easy to use software tools for media production and a comprehensive list of the application or software used for media production is referenced in Appendix I.

There is hardly any literature regarding the professional development or support of teachers in learning to use media production in their elementary-level

classrooms. Yet, many studies have looked at technology and how it can be integrated into schools and classes through professional development. One of the first to examine the influence of technology integration policy was Cuban (1986), who reviewed the historical process of integrating media in the classroom. He argued that the main reason for the low amount of media use in the classroom was because teachers felt that the technology integration policy was trying to replace them with media. The lack of support and attention to teachers' relatedness, mastery, and autonomy prevented effective integration of media in the classroom. Currently, when technology is used as a profitable endeavor for high-stakes testing, teachers use media in order to increase students' achievement on standardized tests and not their students' learning (Ravitch, 2014).

While the Common Core State Standards (CCSS) are evaluated by a computerized test (Porter, McMaken, Hwang, & Yang, 2011), its broad definition of 'text' and its application of technology integration has advanced the digital literacy of all students (Coleman & Pimentel, 2012). Each case study in this dissertation showcases how elementary school teachers connect the CCSS to their media production activity. From the emic approach (Cochran-Smith & Lytle, 1993; Patton, 2015), we can learn how media production can advance the implementation of media production as the teacher connected it to the standards and students' outcomes. Having it become an accountable practice will ease the way for media production to be integrated by teachers, coaches, and administrators.

Media production has a long history in US public schools. As part of experiential learning, students have created essays, written songs, and produced plays

(Dewey, 1916). Since the 1970s, video production has become a way to articulate a message using audio-visual equipment (Culkin, 1964; Hobbs & Moore, 2014; Moody, 1993). With affordable and accessible digital equipment, an increasing number of schools use digital tools for composition and authorship (Bruce & Chiu, 2015). Practicing digital rhetoric promotes the students' abilities to access information, evaluate and analyze, create media messages, reflect on its effects, and be an active citizen (Hobbs, 2010). All these skills are part of being a digital- and media-literate person. Different educational initiatives create the foundation for this learning to happen in US public schools.

Whereas L.A. Unified School District's initiative to give an iPad to every students has failed, been criticized, and been investigated by the FBI (Blume, 2015; Gilbertson, 2014), many other more successful initiatives have been carried out in public schools across the country. Blended or hybrid learning was implemented for more than three million K-12 students in 2009, and the estimation is that by 2019 more than half of all U.S. schools will implement a blended learning environment (Horn & Staker, 2011). Connected learning (Ito et al., 2013) links different aspects of in- and out-of-school learning through digital media. Its successful implementations in cities like Chicago, Washington, DC, Pittsburg and Dallas was thanks to the investment of the MacArthur Foundation (Cities of Learning, 2015). The American Library Association implemented and studied how to integrate the practice of information literacy through its project *Information Literacy* (American Library Association, 2015). Initiatives such as the Hour of Code (code.org) and Codecademy (Codecademy, October 4, 2015) promote information and communication technology

(ICT) skills in schools. The International Society for Technology in Education (ISTE) promotes initiatives to integrate technology in schools as a tool for digital storytelling, digital citizenship, and assistive technology. The organization created standards for teachers, students, administrators, and coaches in order to align digital literacy with the CCSS (International Society for Technology in Education, 2015). All these initiatives to deepen learning through technology continue a long legacy of media literacy education (Cuban, 1986). Focusing on digital and media literacy means that teachers are promoting five competencies (access, analyze, create, reflect, and act) using different production activities (Hobbs, 2010). These competencies encompass blended and hybrid learning, connected learning, ICT skills, digital storytelling, digital citizenship, assistive technology, and above all, the essential traditional and new literacies that 21st-century students should have (Davies et al., 2011). Nevertheless, fewer than half of U.S. teachers use media production while more than sixty percent attend professional development programs in technology integration (Gray, Thomas, & Lewis, 2010).

Implementing digital and media literacy can happen only with in-school support. This support, according to Ertmer (1999), has four components (access, time, training, and tech support). The school must have access to basic technology in order to practice digital and media literacy. Students, teachers, staff, and administrators should have access to computers, mobile devices, cameras, and Internet. The schedule should allow time for trial and error that would eventually promote digital literacy skills and enhance learning. Professional development opportunities should be given to staff in order for them to feel capable of implementing media production in class.

Lastly, there should be constant technical support to overcome hardware and software problems. While these four components are logical to promote digital and media literacy, the question remains: how can educators in an elementary public school following the CCSS and under the pressures imposed by standardized testing devote the needed time, resources, and support to media production?

While technology integration is used in the name of efficiency, the hidden goal of the policy is replacing teachers, improving test scores, and saving money (Ravitch, 2014). In many cases, teachers are not being asked; they are forced to implement technology. This is why “access to equipment and software seldom led to widespread teacher and student use” (Cuban, Kirkpatrick, & Peck, 2001, p. 813). Teachers would be more likely to use technology if it solves classroom management or instruction problems while allowing them to retain authority in their classroom (Cuban, 1986). In addition, using technology in the classroom can be intimidating and challenging for many teachers.

For these reasons, Coburn and Stein (2010) described how the support team (literacy and math coaches) can promote best practices from the research in the classroom; Booth (2003) suggested that school librarians should be a resource; and Greenwood and Abbott (2001) talked about the lack of professional development and day-to-day support for teachers, in particular special educators. However, the support team can only help teachers who are motivated and agree to be supported. The importance of the relationship between teachers’ motivations and their in-school support when implementing media production has not been researched. Several studies have looked at the motivations of teachers to use digital technology (Kordaki,

2013; Mama & Hennessy, 2013). Nevertheless, our understanding of teachers' motivations to use digital media is in its infancy (Hobbs & Tuzel, 2015).

Significance of the Study

This multiple case study allows us to have a glance at four elementary teachers who use media production in various ways as part of a whole-school digital literacy integration initiative. Exploring their practice, as professional educators in a US public elementary school while being evaluated according to their students' proficiency and the CCSS, provides a unique look at the benefits and challenges of media production for K-4th-grade students and their teachers. By interviewing, observing, videotaping, and surveying the four teachers and their support team members from the same school, I was able to better understand how media production can be applied in the specific context of one school. While each case study has a particular context, the findings can help us transfer these applications for media production into other K-4th grade classrooms with similar characteristics.

Research Questions

This study addresses the gaps in the literature of media production education by exploring how to implement media production in an elementary school. The findings help us understand the advantages and challenges of integrating media production as a crucial educational practice for our students' future. This exploration offers a practical framework for educators, administrators, curriculum designers, and professional developers. The framework describes best practices and challenges of media production in the elementary-level classroom.

This study explores the integration of media production by looking at three research questions centered on motivation, practice, and support: (a) Why do some elementary school teachers practice media production with their students? (b) How do these teachers differ in their media production practices in their classes? (c) What is needed to promote a variety of media production practices in elementary education?

Overview of the Research Design

I applied an emic approach (Cochran-Smith & Lytle, 1993; Patton, 2002) to explore media production in elementary schools, broadening my understanding of the cognitive, social, and emotional phenomena of producing media in an elementary class from the educator's perspective in order to influence current policy. In this dissertation, an *emic approach* means to give voice to the teachers as research participants, using their quotes from interviews, description from observing them, their survey results, and their Twitter feeds. For that reason, in my dissertation research, I explored why four educators in a Northeastern public elementary school used media production as part of their teaching; how they used media production in different ways; and what was needed for each one of them to successfully use their particular practice of media production.

Methods and Procedures

Ocean Elementary has been integrating digital technology since the mid nineties. In the summer of 2013, the school media library specialist participated in the Summer Institute in Digital Literacy at the University of Rhode Island, a professional development program developed by Renee Hobbs and Julie Coiro. During the 2013-2014 school year, he gathered a faculty interest group together with the literacy coach

and they co-hosted a voluntary early-morning book club on digital and media literacy, using a book about implementing media literacy in an urban elementary school (Hobbs & Moore, 2013). I was invited to give guest workshops. After a successful year of discussions and initial practices by the participating faculty, the school principal asked the superintendent to make it an official initiative. Starting the school year of 2014-2015, the district contracted with Dr. Hobbs to offer a professional development program in digital literacy. Dr. Hobbs met with a group of administrators to create shared goals and map the initiative district-wide. Each school in the district was invited to identify interested teachers to serve on the Digital Literacy Leadership Team. In addition, each school convened a group of Catalyst Teachers, who met in half-day sessions, learning from Dr. Hobbs and helping to promote digital and media literacy practices in the school. The Catalyst Teacher group at Ocean Elementary had twelve members including the principal, the library media specialist, the math and literacy coach, the behavior specialist, and several full time teachers. Starting at September 2014, I joined the initiative by giving technical and curricular support to the Ocean Elementary staff. I started to administer the survey, conduct the interviews and observations in March 2015.

Participants

My purposive sample (Fraenkel, Wallen, & Hyun, 2011) consisted of a total of nine participants: four support staff, four full-time teachers, and the principal from Ocean Elementary School. In the academic year of 2014-2015, the school had 11 professional development team members and 25 certified full-time teachers. In Appendix J, I provide a timeline of the professional development and research

components of this initiative. Around the end of January, upon IRB approval, all teachers were introduced to the study and were invited to take part. From those who volunteered, I purposefully identified four diverse teachers and four professional development team members from among those who volunteered to participate. Each of the participants was chosen according to their level of media production integration and their diverse approach to using media and technology. I aimed to find different motivations, practices, and forms of support for media production.

Data Sources

The use of semi-structured interviews enabled me to more fully understand teachers' interpretations of their professional aims and goals, their instructional strategies, and their perceptions of school support. As a multiple case study, I combined Seidman's (2006) three-step interview structure for each of the eight participants with focus groups (Krueger & Casey, 2009). Seidman suggested conducting three interviews to achieve a deep understanding of the phenomena and reflect on analysis as a way to address threat to internal validity. The first interview focused on introduction and life history; the second interview delved into details of the participants' experiences; and the third interview was a reflection on the meaning of the findings. I conducted the first individual interviews during the first month of the study while I videotaped five lessons and took notes (Patton, 2015). During the first two months, I asked each participant to invite me to their classroom when they were practicing media production. I also asked them to fill out the 48-item digital-learning motivation profile. Once the observations were over, I conducted two focus groups and a second individual interview with each participant. By the end of the

year, after analyzing the preliminary data, I conducted a third interview in pairs. I also interviewed the principal to better understand the school context.

Analysis

I interviewed and observed using a video recording device throughout all phases of the research process. Merriam (2001) described a simultaneous process of gathering data and analyzing it as part of case study research in education. While gathering data at Ocean Elementary School during spring 2015, my analysis evolved and I started to look at the three variables and compared between the three cases to triangulate and validate relatedness, mastery, and autonomy. During the two first months of interviews and observations, I triangulated the three data sources (questionnaire results, observation notes, and interview transcripts) to create a chart for each participant's relatedness, mastery, and autonomy (Patton, 2015). Later, I added students' artifacts and the teachers' Twitter feeds to triangulate the timeframe and achieve a higher level of validity.

To address matters of internal validity, I triangulated the interview data with the observation notes to make sure the analysis had internal validity. In addition, I shared findings with participants in the last individual interview to receive their reflection as a member check (Merriam, 2001) to enable participants to validate my data analysis. I had a prolonged engagement of a year and a half at Ocean Elementary, spending time there on a regular basis from January 2014 til June 2015. In order to address issues of generalizability, I created an index of media production practices for other educators to extrapolate relevant practices for their own settings. By applying all these trustworthiness, credibility, and transferability techniques

(Lincoln, & Guba, 1985), I was able to connect elementary school teachers' motivations to their practice of media production as well as the support they need.

Organization of the Dissertation

This dissertation is organized into seven chapters. Chapter 1 introduces the statement of the problem, the significance of the study, and an overview of the research, including the methods and procedures used in the study. Chapter 2 is a literature review, including the theoretical framework of the study as well as relevant research in the area of digital and media literacy, technology integration, and teachers' motivations to apply media production. Chapter 3 outlines the methodology that was used to research the use of media production in the participants' classes. Chapters 4, 5, and 6 each portray one case study of Ocean Elementary teachers and their support team as they use media production in their classrooms. Chapter 7 provides a discussion of the findings, limitations, and implications; recommendations for future research; and initiatives to implement media production in elementary schools.

Chapter 2 - Literature Review

Media Production in Education

Media production is a process in which a group of people or an individual compose a message using mediated communication through five linear stages: planning, pre-production, production, post-production, and presentation (Ohler, 2013). Whereas the professional media industry uses media production for entertainment, persuasion, or information, educators use it to enhance students' learning alongside digital and media literacy competencies (Hobbs, 2010; see Figure 2.1 and Table 2.1).

Figure 2.1. AACRA Model (Hobbs, 2010).

Table 2.1.

Essential Competencies of Digital and Media Literacy

Competency	Description
Access	Finding and using media and technology tools skillfully and sharing appropriate and relevant information with others
Analyze	Comprehending messages and using critical thinking to analyze message quality, veracity, credibility, and point of view while considering potential effects or consequences of messages
Create	Composing or generating content using creativity and confidence in self-expression, with awareness of purpose, audience, and

composition techniques

Reflect	Applying social responsibility and ethical principles to one's own identity and lived experience, communication behavior, and conduct
Act	Working individually and collaboratively to share knowledge and solve problems in the family, the workplace, and the community and participating as a member of a community at local, regional, national, and international levels

Hobbs' access, analyze, create, reflect, and act (AACRA) model is circular and refers to different media literacy pedagogies, of which media production is but one. Continuing the long legacy of learning by doing (Dewey, 1916), play (Vygotsky, 1978), critical literacy (Freire, 1970), and media analysis (Hall, 1980), media production promotes these five digital and media competencies: access information; analyze media messages; create media messages; reflect upon use of media; and act responsibly. The five media production stages and the five digital and media literacy competencies can be seen as one process. In the access stage, students negotiate and decide on an idea. To analyze, they research the topic and plan the production. To create, they take on professional roles and produce a message. Next, to reflect, they edit the raw material, making it into a complete product. In the act stage, they either upload it online or make copies for friends and family and have a public presentation.

The media message can be produced as an image, audio, video, or any other digital media. Still, the production is created in five stages through which the producers demonstrate their abilities across the set of five digital and media competencies. The choice of the platform should not only be determined by accessibility to the media but should also align with the characteristics of the medium (Meyrowitz, 1998). Similarly, during the planning stage, the producers should decide on a preferred genre that would

fit their message. Especially in educational settings, we can see eight different genres that teachers and students like to use: pre-selected clips, project demonstrations, public service announcements, news reports, interviews, documentaries, dramatizations, and book reviews (Kirkland, 2006).

In different teachers' guides for media production curricula (Fraser & Oram, 2003; Kenny, 2004; Kyker & Curchy, 1994; 1995; Readman, 2003; White, 2007) there are examples of how to use media production in school settings to enhance media literacy skills and, more specifically, technical skills. Table 2.2 summarizes the different aspects of media production: five steps, five competencies, five platforms, and eight genres provide a broad scope of possibilities to adjust media production to any subject matter in any grade. Yet because of the broad spectrum, it is difficult to find how to integrate media production into a specific context. The extensive options make it very hard to comprehend and practice without prior knowledge of production. Many books, reports, teachers' guides, and articles have tried to demystify the process of media production for educators.

Table 2.2.

Aspects of Media Production Pedagogy

Aspects	Categories	Scholars
Steps	Planning	(Ohler, 2013)
	Pre-Production	
	Production	
	Post-Production	
	Performance-Distribution	

Digital & Media Literacy Competencies (Hobbs, 2010)	Access	(Burn & Durran, 2007; Parry, 2013; Seiter, 2004)
	Analyze	(Arndt, 2012; Banerjee & Greene, 2006; Buckingham, 2003; Hobbs, 2007; Miller, 2010)
	Create	(Halverson, 2010; Niesyto, Buckingham, & Fisherkeller, 2003; Tyner, 2003)
	Reflect	(Bazalgette, 2010; Beach & Swiss, 2010; Denton, 2012; Robbins, 2010)
	Act	(Chávez & Soep, 2005; Goodman, 2003; Hobbs, Donnelly, Friesem, & Moen, 2013; Soep, 2006b)
Media Platforms	Image, audio, video, social media, digital media	(Hobbs & Moore, 2013; Meyrowitz, 1998)
Genre	Pre-selected clips	(Kirkland, 2006)
	Project demonstration	
	Public service announcement	
	News report	
	Interviews	
	Documentary	
	Dramatization	
	Book reviews	

The majority of the educational media production literature in the US (referred to as youth media) focuses on teenagers' civic engagement in out-of-school programs (FisherKeller, 2011; Goodman, 2003; Halverson et al., 2012; Ito et al., 2013; Soep, 2006a; Tyner, 2003). Given that the UK has had a national curriculum in media education since the late 1980s (Stafford, 2001), British research showcases K-12 students' use of media production as a strategy to explore their identity while analyzing and interpreting messages from a cultural studies perspective (Buckingham, 2003; 2008; Buckingham & Sefton-Green, 1994; Burn, 2009; Reid, 2009; Sefton-Green, 2006; Willett, 2011). More specifically, regarding the UK elementary school curriculum, we can find a deeper focus on multiliteracy skills as an outcome of media production activities (Bazalgette, 2010; Burn & Durran, 2007; March, 2006; Parry, 2013; Potter, 2010; Willett, Richards, Marsh, Burn, & Bishop, 2013). In recent years, several reports (Council on Communications and Media, 2013; Guernsey, 2014; NAEYC & Fred Rogers Center, 2012; Rideout, 2014) have outlined the benefits of media production with mobile media for young children, encouraging the integration of media production in U.S. elementary schools. As a result, there is a growing body of literature about media production in U.S. elementary classrooms and its effect on K-4th-grade students' literacy skills (Donohue, 2015; Edelman, 2013; Hobbs & Moore, 2013; Souto-Manning, 2013).

Motivation to Teach Media Production

Many parents and teachers today approach media with a sense of concern and anxiety. Much of the content of television and movies is developmentally inappropriate for young children. The growing evidence of the attention deficit

caused by passive viewing of digital screens worries some educators. Previously, concerns about listening to the radio or watching television drove momentum for media literacy education. For many parents and educators, media literacy is an educational practice that helps protect children from the risks and harms of media exposure. Lately, publications in *Time Magazine* (Parents, calm down about infant screen time, 2015), *Forbes* (Shapiro, 2015), and *Harvard Gazette* (Powell, 2015) have described the shift in the approach developed by the American Academy of Pediatrics (AAP), whose strict recommendations regarding “no screen time for children under age two” have shifted to acknowledge the use of tablets and mobile devices among very young children.

The current reports that distinguish between passive screen time and active production helps to promote the benefits of media production at the elementary level. Although media literacy education began as a response to the need to protect students from the potential risks of media by demystifying media messages (Buckingham, 1998; RobbGrieco, 2014), the current shift to empower students to produce their own media messages is important. More and more studies show advantages from using, interacting with and creating digital media (Council on Communications and Media of the American Academy of Pediatrics, 2013), which is a form of empowerment.

In their 2013 book, Hobbs and Moore explored teachers’ differing motivations about media literacy to determine the interplay of protectionist and empowerment attitudes. They developed a 48-item survey (Digital Learning Profile – see Appendix E) that positions attitudes of protectionism and empowerment on a continuum. They conceptualized that teachers might have a mixture of both of these attitudes. Hobbs

and Moore claimed that the intensity or strength of teachers' attitudes toward empowerment and protection may affect their classroom practices and curricular choices. Their online Digital Learning Profile measures the different motivations toward the use of media and technology in the classroom as well as the strength of their protectionist and empowerment motivations.

But not all media literacy scholars agree with these assumptions. The debate over the protectionist or empowerment goals of teaching media has a long history, going back to Masterman (1985) and Buckingham (1998) who called for the use of popular culture to reach the students' world instead of protecting them from the mass media. The recent debate between Potter and Hobbs illustrate the tension between these differing conceptualizations of media literacy (Potter, 2011). While both agreed that protectionism and empowerment are important, Potter emphasized the obligation to demystify and reveal the negative effects of media while Hobbs frames media literacy as a form of literacy and calls for building upon students' knowledge, interests and skills. The acknowledgment of the relevance and value of both approaches is important to move toward a more coherent and effective use of media in education.

In regards to media production, there is a similar debate about whether media production is an educational activity that promotes media literacy (Hobbs, 1998). Many limitations, such as standards-driven curricula, budgets, teachers' motivations, teachers' practices, and school support, prevent the integration of media production in school. In addition, there are pedagogical challenges when using media production in the classroom. Some of these challenges include the creation of transgressive content

(Grace & Tobin, 1998) and challenges of classroom management (Hobbs & Moore, 2013). Blackwell, Lauricella, and Wartella (2014) examined the attitude of early childhood educators regarding their digital media use. They found that aside from technical and procedural challenges (called first-order barriers), teachers with more experience tend to have more negative attitudes toward technology use in their classroom; yet, ironically, these teachers use it more than less-experienced teachers who had more positive attitudes. In their conclusion, Blackwell et al. suggested paying more attention to second-order barriers (teachers' attitudes, confidence, and practice) by explicitly stating the learning benefits and strategies to integrate technology in the classroom. More specifically, Hathaway and Norton (2012) explained how it is important to move beyond the first-order barriers, such as time, by demonstrating the educational benefits of media production for teachers to implement it in their standards-driven classroom. But in order to advocate for media production practice in a standards-driven public elementary school, we should examine the integration of media production according to the teachers' motivations.

Building upon the work of Deci and Ryan's (1985) self-determination theory, three components can enhance intrinsic motivations of people: relatedness, competency (mastery), and autonomy. Applying Deci and Ryan's self-determination theory can help us to connect questions about motivation, practice and support with relatedness, competence (mastery), and autonomy. In the sections below, I review how the scholarship of media production can be connected to the theoretical framework of self-determination.

Self-Determination Theory and Media Production

According to Ryan and Deci's (2000) human motivation taxonomy, people vary on a scale from being intrinsically motivated to being a-motivated. Ryan and Deci investigated three variables of basic human needs: competency (mastery), relatedness, and autonomy. Pink (2009) adapted their theory and incorporated it into his explanation of how to motivate workers in the 21st century using his concept of motivation 3.0. He explained that in order for a person in the digital age to be engaged, she or he should be intrinsically motivated rather than extrinsically motivated by evaluation, for example. In order to communicate to a non-scholarly audience, Pink replaced Ryan and Deci's terms. He replaced *competency* with *mastery* and *relatedness* with *purpose*. For Pink, a person's move from being a-motivated to intrinsically motivated means changes in the person's feeling of mastery, sense of shared purpose, and level of autonomy. I chose to adapt Pink's concept of mastery since it represent the process of gaining control over the practice more than the concept of competence. Nevertheless, I chose to keep the concept of relatedness and not replace it with purpose since it encompasses the social aspect of having a sense of shared goal better than purpose.

For the purpose of bringing media production into schools, with all the challenges that have been mentioned, teachers must be intrinsically motivated to practice it. Going back to Cuban et al. (2001), if teachers cannot see the value of technology use in their classroom, they will not use it. As seen in Table 2.3, Deci and Ryan's (2002) concepts of self-determination are connected to the three areas of integrating media production into a school. Teacher motivation to implement media

production is connected to their ability to define why they want to implement it and then discuss with their colleagues to achieve an agreement on shared goals. This would be part of a community of practice that involves different teachers, a support team, and administration. In order to be proficient in media production, the teacher undergoes a process of mastering the practice that benefits their students and themselves but brings also challenges. Through job-embedded professional development, the specialist and coaches support the teachers as they master a practice by acknowledging that it is a continuous Sisyphean process and by addressing their trepidations. The last component is autonomy, which means those teachers need reassurance to have trial and error practice in their classroom. Such permission can come from the outside, as a university partnership that showcases exemplary models of exploration in the classroom.

Table 2.3.

Application of Self-Determination Theory into School

Components of SDT	Characteristics	In School
Relatedness	Defining own motivation Community of shared goals	Community of Practice
Mastery (Competence)	Focus on goals, not performance Acknowledging trepidation Sisyphean improvement	Students benefits Teachers benefits & challenges Job-Embedded Professional Development
Autonomy	Reassurance to explore	Whole school integration via University support

Note. This table is an adaptation of Deci and Ryan's (2002) work with Pink (2009) as it would look in a school setting.

“Self determination is a quality of human functioning that involves the experience of choice, in other words, the experience of an internal perceived locus of causality” (Deci & Ryan, 1985, p. 38). In addition, Deci and Ryan acknowledged the importance of the environment and extrinsic motivation in giving an individual choice and control. They used Maslow's (1970) hierarchy of human needs to explain the end goal of being a self-determined person: “all individuals seek to actualize their unique potentials, to become all that they are capable of and to be autonomous in their functioning” (Deci & Ryan, 1985, p. 36). Maslow looked at human needs, and Deci and Ryan built upon his theory to explain how to motivate people intrinsically to become the self-actualized person on the top of Maslow's hierarchy.

Hierarchy of Human Needs in a Classroom

In 1954, Maslow described the five hierarchical levels for a person to become a self-actualized, autonomous person (Maslow, 1970). Once the needs from each class are fulfilled, a person thrives to fulfill the next needs on the hierarchy. As seen in Figure 2.2, the hierarchy of human needs progresses from physiological needs to safety, belonging, self-esteem, and self-actualization needs. A person must have her or his essential physical needs met for them to feel safe and be social. Once a person feels accepted as part of a community, they start to feel self-esteem regarding their self-perception or regarding a skill they have. It is only once a person has self-esteem that they can feel free to take control of their lives and achieve, according to Maslow, the highest level of being human as they reach their full potential. Alderfer (1972)

clustered the needs into three general categories: existence, relatedness, and growth. Based on research, Alderfer claimed that the needs are not hierarchal and can overlap. His interpretation was helpful for coaches and education research to apply Maslow's theory in practice (Lunenburg & Ornstein, 2011).

Figure 2.2. Maslow's (1970) hierarchy of human needs.

Following a long tradition of humanistic education from Dewey (1916) to Friere (1970) and Noddings (2013) to Ravitch (2014), I see teachers as free human beings whose pedagogical practice should be moral, creative, spontaneous, and based on problem-solving, a lack of prejudice, and acceptance of facts. In other words, an ideal teacher would be a self-actualized person who reaches her or his full potential. However, in education, some elements are different. "Without a high salary, the teacher may have trouble fulfilling physiological and safety needs. But belongingness and self-esteem needs can be met daily, and the teacher may be satisfied without ever reaching self-actualization" (Rouse, 2004, p. 28). Anderson and Iwanicki (1984) surveyed teachers about their feeling of burnout and found that their 375 teacher

participants had a highly negative correlation between teacher burnout and their perception of their self-actualization in school. In their conclusion, Anderson and Iwanicki (1984) stated that “teachers must be able to develop their potential in the classroom, derive satisfaction from their teaching accomplishments, and achieve some measure of professional success” (p. 130). They applied Trysty and Sergiovanni’s (1966) version of teacher and administrator perceived need deficiencies.

Trysty and Sergiovanni (1966) took Maslow’s hierarchy of needs and applied it to an educational setting by removing the first class of physiological needs and adding a medium stage between esteem and self-actualization: autonomy. In their research, they found that novice teachers are more concerned about their esteem while experienced teacher are more concerned with their autonomy and self-actualization. They called for professional development in school to use a more social component as the school creates a community with shared responsibility and more autonomy. Intrator and Kunzman (2006) portrayed how professional development based on Palmer’s (2007) *The Courage to Teach* applies Maslow’s concepts. First, it addresses issues of classroom management before curriculum content, and it mainly focuses on the motivation and emotional engagement needed to be a teacher.

When applying Malsow’s hierarchy of needs to professional development of technology integration, the motivation of the teachers and their needs changes because of the technology involved. In her dissertation research, Bichelmeyer (1991) interviewed 31 educators who integrated word processing and email in their classroom. She found, similarly to Cuban et al. (2001), that teachers used the

technology if they found educational goals, if they were part of the decision to integrate the tool, and if elements of adult learning should be used to teach teachers about technology integration. Her findings led her to connect Maslow's hierarchy of needs to a model of technology integration. In their research, Talab and Newhouse (1993) found that Bichelmeyer's (1991) hierarchy predicted the successful adoption of distance-learning technology by 107 high school teachers and facilitators. At the same time, they called for a deeper understanding of teachers' adoption in school since in their research they did not address in-school structure and culture. Bailey and Pownell (1998) also used Maslow's hierarchy of needs for technology integration from the perspective of the tech coordinator. Both Bichelmeyer (1991) and Bailey and Pownell (1998) showed a chronological process based on Maslow's scholarship that promotes the assimilation of technology in the classroom.

As seen in Table 2.4, different scholars had different adaptations of Maslow's hierarchy of human needs according to their discipline and field of study. Each process has the same chronological stages as the initial hierarchy of human needs. As I collected the different approaches into one coherent model that is connected with digital-technology integration, I found self-determination theory to be useful. The three elements of self-determination theory (relatedness, mastery [competence], and autonomy) emerged from different approaches to provide a coherent framework that explained how professional development can encourage the intrinsic motivation of teachers to integrate media production. In her dissertation research, Butler (2004) looked at professional development for technology integration as she applied a constructivist approach. Like previous scholars, she explained that while the end goal

is to reach self-determination, issues of sustainability must first be addressed. In her project, she did not use a whole-school integration but a personal approach to each teacher in order to address particular context issues. Furthermore, while her professional development goal was teachers' self-determination, she did not use Deci and Ryan's theory. As I was collecting the data and starting to analyze the findings, Malsow's hierarchy of needs and Deci and Ryan's self-determination theory seemed to appropriately merge as I looked at studies on technology integration and teachers' motivations while interviewing and observing Ocean Elementary teachers integrating media production in their classrooms.

Table 2.4.

Comparison of Various Models of Hierarchy of Needs

Maslow (1970[1954])	Alderfer (1972)	Trysty & Sergiovanni (1966)	Bichelmeyer (1991)	Bailey & Pownell (1998)
Self- Actualization		Self- Actualization	Integration	Teaching empowerment Continual innovation
		<u>Autonomy</u>	Influence on design	
Esteem	Growth	Esteem	Ownership & Authority	Peer recognition, Team leadership, Teaching <u>competence</u>
Belonging	<u>Relatedness</u>	Social	Equipment Dependability	Peer interaction, Tech committee
Safety	Existence	Security	Time &	Confidentiality

technology Technophobia
Administrative Support

Physiological Time & Tech support

While basic resources such as equipment and time are crucial to start a technology integration initiative, too often teachers' relatedness, mastery, and autonomy are left out. Figure 2.3 displays my visual adaptation of the hierarchy of needs and self-determination theory, which is specifically designed to understand the needs of teachers and the intrinsic motivation to use an instructional practice to meet their needs. I'm combining ideas from Deci and Ryan (1985) who theorized why people would be intrinsically motivated to take an action with Maslow's conceptualization of human needs, which uses a hierarchical structure and a humanistic perspective to explain how people can reach higher levels of self-actualization.

To appreciate Figure 2.3, consider my experience in my research site. Once a school like Ocean Elementary decides on a digital literacy integration initiative, there must be adequate equipment and time in order to start talking about what needs to happen and why and how it will happen. Teachers must have equipment and time to integrate technology, but they will not do it without a sense of shared purpose and educational goals (relatedness). Once the school's community of practice agrees on the value to use technology, they can start to practice and develop their sense of competence (mastery). As seen in the previous research, teachers will use technology only if they are intrinsically motivated, meaning that they have a sense of control and reassurance that they can explore (autonomy). For all those reasons, it is important to

look at how self-determination components (relatedness, mastery, and autonomy) can help integrate media production in schools. In the next section, I introduce three of the five stages, connecting these theories specifically to media production practices in the elementary classroom.

Figure 2.3. Self-determined Model for Integrating Media Production.

Relatedness

Why Should Teachers Use Media Production in their Classroom?

Before you can relate to another person, you need to have your own sense of identity and motivation. Relatedness involves participation in a community of practice that helps you improve as a teacher. As I was looking to define how the components of self-determination theory could be applied to media production in a school setting, I considered the work of Deci and Ryan, who define relatedness in this way:

Relatedness refer to feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness both with other individuals and with one's community. Relatedness reflects the homonomous aspect of the integrative tendency of life, the tendency to connect with and be integral to and accepted by others. The need to feel oneself as being in relation to others is thus not concerned with the attainment of a certain outcome (e.g. sex) or a formal status (e.g., becoming a spouse, or a group member), but instead concerns the psychological sense of being with others in secure communion or unity. (Deci & Ryan, 2002, p.7)

Explaining these ideas to an audience of managers and entrepreneurs, Pink (2009) replaced Deci and Ryan's relatedness for purpose. Instead of a psychological term, Pink used the term *purpose* to claim that in order to have people intrinsically motivated, they need to be part of a community with shared goals. Having a group of people that agree on the same goals can be seen in words of affirmation that focus on why are we practicing media production and less on how we practice it: a community of educators, including administration, that has a shared purpose promotes in-school policies that advance the teachers' intrinsic motivations to use media production. For Pink, it is more than the feeling of belonging but rather a sense of mutual purpose.

Teachers' Digital Learning Profile

In order to feel a sense of shared purpose, teachers must articulate their educational goals. If a teacher has never used digital media, it will be difficult for her or him to point out why it is important. For that reason, Hobbs and Moore (2013) created the Digital Learning Profile (see Appendix E). They observed that some

media literacy practices of teachers varied according to their digital learning motivations. For example, teachers who self-identified as Activists implemented classroom activities that enabled students to create public service announcements on social issues, while teachers who self-identified as Spirit Guides implemented classroom activities that promoted classroom conversation about how to use media to express feelings and emotions. The ability to identify a specific motivation to use media production can help customize in-school support based on particular needs of teachers and finding the people with similar motivations to join the same purpose. Teachers must feel like part of a greater group that values media production practices along with the autonomy to apply media production in their classes. The larger group can be fellow teachers as well as the librarian (Johnston, 2012), literacy coach (Still & Gordon, 2012), math coach (Wachira & Keengwe, 2011), behavior specialist (Maginess, 2010), principal (Libby, Bowyer & Linn, 2008), or superintendent (Biggs, 2013). All can promote digital literacy to enhance students' learning (Pitcher & Mackey, 2013).

Community of Practice

“Communities of practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, McDermott, & Snyder, 2002, p. 4). Moreover, Wegner (1998) explained that for individuals it means to engage with their community, for communities it means to refine and ensure a new generation of members, and for organizations it means sustainability and interconnection within the organization. Lave (1991) looked at community of practice

as a social initiative that internalizes new knowledge of the individual and also creates a sustainable group of people who share an interest to develop their competencies in a certain practice. In order to have a sustainable community that applies inquiry-based learning, the community must transition from a loose social gathering to a community of practice resulting in a shared responsibility, common sense of identity, trust, and respect (Wenger, McDermott, & Snyder, 2002). This reciprocal, recursive, and transformative model engages different people with different levels of knowledge to work together to develop their learning. Duckworth (2006) explained how a colleague can become a resource and a support for new skills and knowledge. This creates a culture of practice that motivates people to explore and develop their practice (Lave & Wenger, 1991). Moreover, this ongoing process of social inquiry also develops the identity of the teachers as they become more knowledgeable about this practice, the meaning of the teaching as the practice evolves, and the community within the organization toward shared goals and professional language (Wenger, 1998).

At the same time, it is important to point out that based on social interactions, community of practice challenges novice teachers and teachers with less expertise in the specific practice that is being shared (Cheng, 2014). The only way these two groups can get into a community of practice is by continuous engagement that eventually changes the practice of the old-timers (Lave & Wenger, 1991). The group dynamics and prior knowledge might create a hierarchy of knowledge that exclude the novice or less experienced teacher from the shared practice whether voluntary or not (Cook & Buck, 2014). Regarding issues of power, there is always the fear that

both the members of the community and the organization would restrict the innovations to prevent any challenge of their authority (Wenger et al., 2002). As mentioned before, having a set of goals that are shared with others and the support of a community to address issues of fear, frustration, and students' transgression are not enough. If teachers are not autonomous in deciding if they can implement media production or not, they will not intrinsically do it.

Mastery

How do Teachers Learn to Feel Competent with Media Production?

Because media production is a complex task, there are a lot of different parts to master, with different benefits associated with the diverse practices for both students and teachers. Part of being masterful is to overcome challenges, and teachers do experience anxiety when managing media production projects in school. Understanding that competence is a never-ending process is key. In the context of a school, the role of a support team can be crucial to help teachers build a sense of competency. Whether it's called *mastery* or *competence*, the underlying concept is the same:

Competence refers to feeling effective in one's ongoing interactions with the social environment and experiencing opportunities to exercise and express one's capacities. The need for competence leads people to seek challenges that are optimal for their capacities and to persistently attempt to maintain and enhance those skills and capacities through activity. Competence is not, then, an attained skill or capability, but rather is a felt sense of confidence and effectance in action. (Deci & Ryan, 2002, p. 7)

Similarly, Pink (2009) defined *mastery* as the desire to get better at something that matters. Pink explained that mastery could be achieved by engagement and includes three elements: mindset, pain, and asymptote. Mindset means that the focus is on the goals rather than on the performance. In our case, a teacher would aim to have the students learn the five digital and media competencies (access, analyze, create, reflect, act - the AACRA model) rather than have them be professional filmmakers. Pain refers to the effort, agony, and frustration of improving your skill. For teachers to use media production, it would be frustrating and hurtful to use digital technology and see little improvement while they keep practicing it in their class. The concept of *asymptote* is useful here: it is the understanding that while the ultimate level of proficiency is unreachable, you should always strive to self-improve. In other words, teaching media production in schools is not about reaching the highest level of technical competence, like a Hollywood blockbuster production. Integrating media production in the classroom means that the teacher should ameliorate their practice on a daily basis knowing that it is a never-ending process. Although using media production benefits the students and teachers, its practice in the classroom challenges the teacher's perception of performance, feeling of frustration, and proficient practice. And yet, focusing on learning goals, being tenacious over technical challenges and students' performance, and understanding that there are constantly ways to improve and create the feeling of mastery.

Goals for Students' Mastery of Media Production

If we want to advocate for teachers' use of media production in their classrooms, they must understand how it will benefit their students and how it will

meet their learning goals. Mastering media production in the classroom must focus on the goals and not the performance. Most of the media production literature described either the process of production and its educational value or students' artifact as the final product, which is a testament of the students' learning. In this section, I would like to consolidate all the research on students' media production to list its educational benefits. Table 2.5 lists six educational benefits of using media production that can promote a teacher's feeling of mastering media production.

Table 2.5.

Students' Benefits from Using Media Production in the Classroom

Benefit	Definition	Examples
Engagement	Investment in the cognitive, social, and emotional aspects of learning by being resilient to frustration and challenges. (Finn & Zimmer, 2012)	(Rozema, 2007)
Collaboration	Cooperation of diverse individuals using their different skills with trust, respect, and flexibility toward shared goals. (Serce & Yildirim, 2006)	(Hobbs & Moore, 2013)
Voice or Identity	Participation in meaningful decision-making and dialogue as part of personal development and social relationships to build community and trust. (Buckingham, 2008; Ferguson, Hanreddy, & Draxton, 2011)	(Marsh, 2005)
Problem-Solving	Identifying causes, finding solutions, and avoiding problems while being flexible and effective. (Yang, 2012)	(Burn & Durran, 2007)
Conceptual Thinking	Understanding the relationships among multiple strategies and being able to analyze a problem, evaluate	(Dezuanni & Gattenhof, 2015)

contradictions in solutions, and suggest various strategies by articulating a structured argument. (Kazemi & Stipek, 2008)

Digital Citizenship	Using technology appropriately and responsibly (Ribble, 2015)	(Kennedy & Swain-Bradway, 2012)
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Engagement. Students' engagement, according to Finn and Zimmer (2012), has four components: academic, cognitive, social, and emotional. Being engaged means that students are invested in the learning process and demonstrate participation through their ability to be resilient to frustrations from cognitive, social, and emotional challenges. Engagement can be observed while students demonstrate their ability to focus, share, be confident, own their creation, and persevere through many challenges on the way. Rozema (2007) suggested using podcasts to engage students in book reports. From his teaching experience, having an authentic audience prompts the students to invest in their learning to produce meaningful text that reflects their reading. His students demonstrated investment through their devotion to create a coherent four-minute podcast reflecting the book. Although Rozema gave the students specific questions regarding the plot, the mood, and the message by creating an engaging opening, music, excerpts of the text, and citations for copyright materials, they showed creativity in their choices and their rationale. Parry (2013) argued that the use of popular culture enhances students' engagement and allows them to reflect through their collaboration on each other's cultural capital.

Collaboration. "Collaboration is a synchronous activity of a gathering of parties with diverse skills and backgrounds, contributing those skills and resources in an atmosphere of trust, respect and flexibility, in order to achieve shared goals and

objectives” (Serce & Yildirim, 2006, p. 167). Working toward media production by definition requires collaboration. The social interactions between the students teach them about negotiation, compromise, and inclusion. At the Powerful Voices for Kids summer camp (Hobbs & Moore, 2013), the third-grade students worked collaboratively on a comic book to raise awareness of homelessness in Philadelphia. The teacher, Rachel, used collaborative storytelling as a method to promote the digital and media literacy skills of her students. Because her students became curious about the topic after a tour in the city and did not have prior knowledge of the homelessness phenomena, Rachel decided to engage all of them together to research the topic. The students were fully engaged and worked in pairs to create a comic book together that would answer their questions about homelessness. Their thirst for knowledge promoted an environment of trust, respect, and flexibility to use popular culture or their own drawings, along with reliable information they found online. Hobbs and Moore described Rachel’s instruction as a dialogic pedagogy where Rachel was attentive to her students’ voices that led to a collaborative storytelling project.

Voice and identity. Ferguson, Hanreddy, and Draxton (2011) defined student voice, saying that “Students participate in meaningful decision-making and dialogue regarding their learning environment and classroom climate for the purposes of building upon foundations of community and trust” (p. 55). Furthermore, Buckingham’s (2008) connections between student voice and identity argue that while the term *identity* is broad and vague, “it focuses attention on critical questions about personal development and social relationships—questions that are crucial for our understanding of young people’s growth into adulthood and the nature of their

social and cultural experiences” (p. 19). As educators, we should encourage student voice as a way to practice dialogued, social interactions and also a place to explore and shape the students’ identities from a place of trust and respect. Jackie Marsh (2005) documented a four-year-old girl, a daughter of Somali refugees, as she created her own animated movie using a storyboard to draw her plan, Lego figures to film her characters, and iMovie to edit video and sound. The student had never edited before and did not have access to a computer at home. Marsh described how the process, using multimodal practices from text to visual media, promoted the student’s literacy skills. She learned about different media, narrative structures, and the transduction process from paper to screen by experiential learning and overt instruction. In addition, the student worked with two other girls and experienced social interaction with her peers. With the ability to have access to a computer and tell her stories, the student also was able to have a critical framing and sense of agency. She was engaged while planning the story; she carefully positioned the Lego character as she planned in her storyboard; she went through all the options of sound effects and picked the one she wanted as she had planned from the beginning. Having the experience to create her own story and understand the manipulation and construction of media texts allowed the four-year-old student a safe place to view these media texts from a critical perspective and voice her opinion.

Problem-Solving. Yang (2012) defined problem-solving as the ability to identify causes, find solutions, and avoid problems while being flexible and effective. It means that in order to solve a problem, a student should demonstrate critical thinking to analyze the cause, use the authentic learning experience to offer solutions,

and troubleshoot to avoid other problems. All of that takes place while the students show flexibility and efficiency, meaning they offer unique responses to a problem and ensure practical solutions. Media production is a project-based learning pedagogy where the students undergo a variety of challenges that request solutions. Burn and Durran (2007) spent nine years in elementary and middle schools looking at media production as part of the British national curriculum in media education. They gave many examples about how media production in various ways can be incorporated into geography, science, dance, math, and English classes. One of those examples was a description of first grade students who were assigned to create a stop-motion animation about the folktale of the *Boy Who Cried Wolf* in four hours. The exercise was challenging to the students' cognitive skills because they had to understand the spatial and temporal nature of moving images while they transformed the written text and their storyboard drawings into an audio-visual text using a camera, software, and Plasticine characters. Burn and Durran observed how the social interactions of the young children supported their cognitive development of literacy skills as they playfully added a scene where the villagers, instead of ignoring the boy, made a duck under the cross-bow game. While being engaged, the children were editing, erasing frames, and monitoring the animation, which showcased their newly acquired media literacy skills. Their collaboration and engagement in experiential learning, situated in social and cultural context, allowed them to reach higher levels of literacy as they patiently problem-solved the structure of their media product. Even more so, the young students constructed their meaning actively from their interactions and experience, but since not all of them could control the Plasticine characters, they

observed the animation take an iconic shape on the screen; lastly, they used their prior symbolic knowledge of animated movies to create the characters and scenes. The students not only learned to address challenges and offer creative solutions but also learned abstract concepts as part of their learning process as media producers.

Conceptual thinking. Kazemi and Stipek (2008) defined four components of conceptual thinking in elementary students: the ability to articulate an argument and not just describe a procedure, understand relationships among multiple strategies, re-conceptualize a problem to find contradictions in solutions and alternative strategies, and hold individual accountability while reaching a consensus through a structured argumentation. In order to produce a media message, students must know how to conceptualize their idea and plan it. The process of production requires students to be able to articulate their ideas, negotiate them with their peers, and be able to solve ad hoc problems by suggesting multiple strategies. Dezuanni and Gattenhof (2015) argued that analyzing and producing media in early childhood promotes conceptual thinking. They described how the use of iPads in an elementary classroom enhanced the conceptual thinking of students. In addition, the use of peer feedback to reflect on each other's products helped the children develop communication skills. For example, Emily, a four year old, used the iPad to create a 20-second video with a picture she took from the garden and added her voice over. With the help of her teacher, she created her media production knowing that it would be presented to her peers and family. She composed a frame of the garden as she talked to her teacher about her choices and described the relationship between the items. Then she used an app to record her voice talking about the different elements in the garden. Her experience

demonstrated her understanding of “how media is produced, through a process of selection and construction” (p. 78). Whereas conceptual thinking is primarily cognitive, media production also benefits social and emotional learning.

Digital Citizenship. Ribble (2015) defined digital citizenship as “the norms of appropriate, responsible behavior with regard to technology use” (p. 1). He framed digital citizenship as a concept that have three major effects: the affect on the individual students’ learning and performance, behavior and its effects on the environment in school, and the impact on life outside of school. Kennedy and Swain-Bradway (2012) described how a national positive behavior intervention and resources (PBIS) video contest provided a wide range of short video produced by students to showcase digital citizenship. For example, a teacher and elementary students created a video about an example of positive behavior to teach other students about effective tools for behavior at lunch. At another elementary school, a group of students created an introductory video to explain what PBIS is and give examples for new students.

All the examples above showcase how media production, with its variety in genre, platform, and media, can benefit students cognitively, socially, and emotionally. Having an understanding of the advantages of media production in class is the first step to mastering media production. Instead of thinking about the challenges and frustrations, the focus should be on the reasons to use it. Furthermore, not only do the students benefit from media production; the teachers themselves do. Combining the benefits for the students and teachers allows a clear vision of the goals rather than of performance.

Goals for Teachers' Mastering Media Production

Many of the benefits for students are connected with the benefits for teachers. Teachers have a greater impact on student learning once the students are engaged, collaborate, voice their opinions, explore their identities, enhance their conceptual thinking, problem-solve, and reinforce positive behaviors. Media production in the classroom advances professional benefits for teachers. Having students produce their own media messages during class time and outside of school encourages authentic learning, collegial collaboration, a sense of agency, connection to the community, and new ways to better evaluate students. Table 2.6 demonstrates how each element is defined in regard to media literacy scholars.

Table 2.6.

Teachers' Benefits from Using Media Production in the Classroom

Benefit	Definition	Examples
Authentic learning	An educational activity with real world problem-solving through a community of practice. (Lombardi, 2007)	(Hathaway & Norton, 2012; Henderson et al. 2010; Skouge, Rao, & Boisvert, 2007)
Collegial collaboration	A diverse contribution of teachers, students, and the support team to create a meaningful media message to the target audience. (Chávez & Soep, 2005)	(Hobbs & Moore, 2013)
Sense of agency	A feeling of autonomy, choice, and freedom to initiate a purposeful action. (Lipponen & Kumpulainen, 2011)	Montgomery (2014)
Community connection	A relationship where all are respected, recognized, and qualified to share and	(Zywica, 2013)

comment on the student's
learning experience.
(Beining, 2012)

Formative assessment	On-going diagnosis of students' learning goals through a repetitive process of feedback to improve instruction and achievements. (Hwang & Chang, 2011)	(Olofsson, Ola, Lindberg, & Stödborg, 2011)
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Authentic learning. Lombardi (2007) defined authentic learning as an updated concept from Dewey's (1916) experiential learning. Lombardi explained that "authentic learning typically focuses on real-world, complex problems and their solutions, using role-playing exercises, problem-based activities, case studies, and participation in virtual communities of practice" (p. 2). For teachers, the use of authentic learning brings engagement in real-world problems. The use of media production by definition brings authentic learning due to the format and process. Hathaway and Norton (2012) described how professional development in video essays positively enhanced learning in the participants' classrooms. The participants in the professional development pointed out that the practice of video production allowed them to work with an authentic problem that anchored students' learning. What is more, the use of student-generated video as a learning activity was found by Henderson et al. (2010) to encourage a sense of authenticity as well as student autonomy and motivation. They explained how "embedding video into the curriculum allowed the teachers to engage students in a self-managed process of reflection which was felt to provide more individualized and meaningful feedback than if the teacher maintained the locus of control" (p. 17). This engagement into authentic learning

helps to promote inclusion. Skouge, Rao, and Boisvert (2007) named various options that digital media offer for students with disabilities. Using digital media allows different forms of accessibility and different skills that can bring all students in class to learn. In general, the use of media production in the classroom connects real world experience that brings students and teachers together to be more engaged and deepen their learning together.

Collegial collaboration. Chávez and Soep (2005) looked at the pedagogy of collegiality as they were observing a youth media project in Oakland, CA. They defined it as “a context in which young people and adults mutually depend on one another’s skills perspectives, and collaborative efforts to generate original, multitextual, professional-quality work for outside audience” (p. 411). Bringing Chávez and Soep’s concept into the elementary school context means that teachers, support team members, and students are joining hands to work together to produce a meaningful product for a target audience in and outside school. This is an important part of the support that teachers need. Media production as a collaborative form enhances the connection with peer teachers and students. Hobbs and Moore (2013) described how their model of after-school professional development promoted the collaborative reflection of the elementary school teachers and students. Ms. Ricco came as a mentor to support the 5th and 6th grade teacher in a history class. As the teacher and then Ms. Ricco struggled with technical issues to present a website about Nelson Mandela, she decided to do a Google search. Working together with the students brought insightful reflection on the representation of the picture that would later on be adapted into the website. The students contributed to the production of the

website in collaboration with the teacher as well as the mentor. This support that each one of the media production members gave addresses the issue of teachers feeling aloof in the classroom.

Sense of agency. Lipponen and Kumpulainen (2011) looked at teachers' agency and defined it as "the capacity to initiate purposeful action that implies will, autonomy, freedom and, choice" (p. 812). Being able to record and share classroom work breaks the walls of the classroom and promotes the teachers' best practices. Students' work toward a collaborative media message is a way for teachers to showcase their pedagogy and unique voice in education. The feedback reiterates the message that the teacher matters and her or his work is appreciated. Montgomery (2014) observed how third-grade students created a podcast about Native American boarding schools. Their teacher promoted their work online and they received over 100 comments. The collaborative awareness campaign through their podcast helped the school and community to have a transformative consciousness. "Laura's statement that supporting her students' creation and dissemination of a podcast that taught others about historical injustice and oppression was personally 'life changing' serves as another example of the transformative power of education for critical democracy" (p. 215). Not only did the students feel valued and influential on a social justice matter, but also the teacher as the initiator and supporter saw how her practices were being transformative to others. In that sense, the ability to have agency through media production also promotes connection to the community.

Community connection. Beining (2012) advocated for a closer family-teacher connection. She called for both community and teachers to build a

relationship where everybody feels respected, recognized, and qualified to engage in the students' learning experience. She welcomed comments from everyone as vital partners in the students' learning. Because the last stage in media production is sharing, the potential is there to welcome comments from the community, including parents, family, stakeholders, and community members. In her research, Zywicka (2013) studied how six kindergarten teachers and 32 families communicated through social networks and a designated website for students' artifacts. One of the teachers pointed out that it showcased the diversity of students and families. After practicing the home-school posting, the amount of comments and sharing grew. More than eight percent of the parents stated that this project helped them to get to know the teacher better. All in all, students' learning was enhanced and supported by reciprocal communication online as well as the mutual appreciation of families and teachers. This is an important factor, as teachers have more and more demand to evaluate the students systematically.

Formative assessment. Hwang and Chang (2011) looked at ways to use mobile media for formative assessment. They defined formative assessment as “a process that provides feedback and support during instruction, such that teachers and students can adjust ongoing instruction and learning to improve students' achievement of planned instructional outcomes” (p. 1024). In their experiment, Hwang and Chang found differences in students' engagement with each other and the mobile media: “the experimental group students spent most of their learning time observing and finding the answers from the target learning objects” (p. 1029). Olofsson, Ola Lindberg, and Stödborg (2011) described the use of formative e-

assessment with students' vlogs on the website VoiceThread. They analyzed online feedback from twelve students who altogether gave 103 comments. The four groups differed in their level of feedback, ranging between monological and dialogical communication. As time progressed, they noticed a larger amount of posting that reflected their practice. In conclusion, Olofsson et al. explained that "the way students apprehend the assessment practice could be an important aspect of their meaning-making processes, and vital to the outcomes of any education, course, program, etc." (p. 51). In a standard-driven era, teachers can use media production as part of a formative assessment that can be posted online for parents to see their child's progress. The digital recording adds a feature that supports the teachers' instruction and evaluation.

So far, we have seen the benefits for students and teachers as part of the understanding that the focus should be on learning goals and less on performance. Nevertheless, bringing media production into the classroom brings also transgression behavior and trepidation of teachers losing their authority. In order to master media production, teachers must acknowledge their fear and address it. But in order to do it, we must first understand what these challenges are and how to address them.

Trepidation Toward Mastering Media Production in the Classroom

Katherine Fry (2015) described how during a meeting with a school principal and the police representative, she observed and heard "the tremendous amount of fear, almost panic, adults express for children when new communication devices bring with them both new ways to communicate and new, unexpected consequences" (p. 66). Indeed, having students produce media brings many challenges to classroom

instruction and management. Besides issues beyond the control of the teachers in the classroom such as budget, curriculum standards, and community values, media production creates what Hobbs and Moore (2013) called *messy engagement*.

Experiential learning during media production is not the same as traditional quiet reading. Producing media engages students to problem-solve and work collaboratively using equipment. According to Hobbs and Moore, “messiness includes, but is not limited to, behavioral disruptions, asking questions that teachers can’t or won’t answer, making noise and getting physically excited, and going ‘off task’ by exploring questions and ideas outside the parameter of the lesson” (p. 227). The challenges to classroom management do not differ from any non-traditional learning activity such as pair-share, jigsaw, student teams-achievement division, etc. (Lane, Menzies, Bruhn, & Crnabori, 2011). Adopting experiential learning is an active process that might frighten teachers who have challenges in their classroom management.

Besides the challenges to teachers’ classroom management, using media production in the classroom also leads to students’ transgressions. Grace and Tobin (1998) documented how a group of elementary students used video production to have fun creating characters who got their bottom on fire. The mixture of pleasure and transgression is explained using Bakhtin’s term of *carnavalesque*. Students are empowered through media to play and contrast the high authority of the teacher and curriculum with the perceived low authority of the children and their interests. Using genres such as parody allows the students to challenge authority. Being a media producer, they receive power that in any other activity would be forbidden. Especially

in elementary level, students feel a need to invert the hierarchy. Parry (2013) pointed out that students use their knowledge to create these complex and contentious issues. She called for acknowledging the students' use of genre and not inhibiting the students' pleasure, which is an important part of the production process.

On the other hand, when student pleasure crosses the line into bullying, the teacher should interfere. This is a fine line, and as such, it is challenging for teachers to know how to manage it. Kyriacou and Zuin (2015) analyzed three case studies in which teachers were cyberbullied by students who uploaded videos of them in unflattering situations. In their conclusion, Kyriacou and Zuin recommended that teachers use more mobile devices to get familiar and talk about digital citizenship. In addition, Nixon and Comber (2004) described how two elementary school teachers in Australia created grounded rules to explain to their students in a filmmaking process that there are not going to be any violent scene. A deep discussion over the consequences and interpretation of transgressive scenes helps to draw it to the young students' attention.

Along with seeing the goals, teachers should embrace their fear of using media production. Addressing issues of student transgression and teacher trepidation will advance the mastery of media production as an educational tool in the classroom. The third component of mastery with goals and fear is asymptote.

Teachers' Sisyphean Process to Master Media Production

Like an asymptote, mastering a skill is a Sisyphean task that will never reach the ultimate level of proficiency. In other words, mastering media production is a never-ending process. Pink (2009) gave many examples of experts who are still

thriving to be even more proficient, knowing that it makes them more skillful but that it is an unreachable end. Along with acknowledging the goals of the educational practice of media production and the fear that it will challenge teacher authority, teachers should understand that they need the basic skills of media production to master it while they learn to improve their practice. Instead of waiting to be proficient like a Hollywood filmmaker, teachers should have the basic tools of media making that will enable them to start a journey toward becoming more and more proficient in media production as an educational tool. One of the ways to start scaffolding a new skill for teachers inside the school is the support team, such as specialists and coaches.

The Role of the Support Team

Media production is not only a complex practice but for many teachers, it is a completely new and unfamiliar practice. In order to become competent, teachers benefit from people who have mastered the practice, similar to the apprenticeship model where the experienced mentor supports the novice. In the K-12 school context, specialists and coaches are part of the support team for teachers. Here I introduce three roles: library media specialist, literacy and math coach, and behavior specialist.

The role of the library media specialist was redefined by the American Association of School Librarians as the person who (a) provides intellectual knowledge and physical resources, (b) provides instruction to foster competencies and stimulate interest in information and ideas, and (c) works collaboratively to design learning strategies (American Association of School Librarians & Association for Educational Communications, 1998). Woolls (2004) extended the responsibilities

of the library media specialist to give professional development to the school staff in order to introduce them to innovative ideas and instructional strategies. In other words, the library media specialist is an information specialist, a teacher, and an instructional consultant (Turner, 1993) .

Math and literacy specialists changed their roles considerably in title I schools since the authorization of the Elementary and Secondary Education Act (1965) to its reauthorization as No Child Left Behind (2001) that led some of them to become coaches (Dole, 2004). Nowadays, the responsibilities of a math or literacy coaches are to (a) build trust and rapport with teachers, (b) provide theories of math and literacy instruction and strategies, (c) demonstrate these strategies, and (d) give opportunities to practice these strategies (Hull, Balka, & Miles, 2009; Joyce & Showers, 2002). The coaching should be an ongoing, consistent support to achieve these three goals (Croft, Coggs, Dolan, & Powers, 2010; Poglinco et al., 2003) .

Behavior specialists have been part of a school's support team for many years. But it was not until the official authorization of Education for All Handicapped Children Act (EAHCA, 1975) to provide free appropriate public education to all children that their position became part of the public school system by law. Free appropriate public education was applied to public elementary schools after the 1986 amendment to EAHCA that included a focus on early childhood. The role of the behavior specialist is to (a) establish a shared framework, (b) help parents and teachers become better consumers, (c) ensure educational relevance and necessity of support services, (d) collaborate and engage in the context of the general education program and environment, and (e) evaluate the impact of related services (Giangreco,

Prelock, Reid, Dennis, & Edelman, 1999). The last authorization of the law called the Individuals with Disabilities Education Act (IDEA, 2004) defined a three-tiered process called Response to Intervention (RTI) to evaluate students' need for an Individualized Education Program (IEP). The behavior specialists along with the administrators, home room teachers, reading and math interventionists all are part of a school team that evaluates students' needs and their response to interventions (Hallahan et al., 2012; Pitcher & Mackey, 2013).

Historically, Title I schools have received funding to improve reading and math for all students in addition to Title II designated funds for school library resources, textbooks, and other instructional materials (Elementary and Secondary Education Act, 1965). In the current policy of No Child Left Behind (2001), IDEA (2004), and Race to the Top (2015), technology integration became part of Title I funding as well as other federal and state funding. This means that today, the support team members have become the front-runners of digital integration, whether it is for teaching digital and media literacy skills (Hobbs, 2010), enhancing math or literacy skills (International Reading Association, 2004; National Council of Teachers of Mathematics, 2009), reinforcing positive behavior interventions and services (PBIS), or providing assistive technology (Hallahan et al., 2012). While the particular work of each specialist and coach is well documented, there are no criteria for coaches and they receive different levels of training (Giangreco et al., 1999; International Reading Association, 2004; National Council of Teachers of Mathematics, 2009; Woolls, 2004). The daily support of teachers by the support team is called job-embedded professional development.

Job-Embedded Professional Development

“Job-embedded professional development refers to teacher learning that is grounded in day-to-day teaching practice and is designed to enhance teachers’ content-specific instructional practices with the intent of improving student learning” (Croft, Coggshall, Dolan, & Powers, 2010, p. 2). There are four strengths for practicing job-embedded professional development, as it is learner-centered, knowledge-centered, community-centered, and assessment-centered (Coggshall et al., 2012). Being within the school, job-embedded professional development is a continuing and daily support that is available and accessible to all teachers. Moreover, it uses modeling of best practices to showcase how to use innovative and effective pedagogies while addressing the context of the teacher’s classroom with her or his students. This creates a learner- and knowledge-centered approach to foster teacher professionalism (Darling-Hammond et al., 2009). Having enough team members to support media production and to troubleshoot any pedagogical, behavioral, or technical problem creates a feeling that the teacher is not alone and she or he can rely on the support team for help. The results and analysis of job-embedded professional development is aligning with students’ achievements that promote the impact of teachers’ instruction (Learning Forward, 2011).

Having a library media specialist, literacy coach, math coach, and a behavior specialist to support instruction and provide ongoing professional development allows teachers to feel secure that they can try to use media production in their classroom. However, job-embedded professional development has its own critics, who claim that it continues the current policy that connects teacher evaluation with student

achievement instead of learning (Ravitch, 2014). If the other two parts (relatedness and autonomy) of the self-determination process are not applied as well, job-embedded professional development makes the teachers depend on the coaches and specialists. Not only that, but the teachers are still accountable for their teaching without any authority or autonomy. The top-down model promotes teachers' knowledge via modeling or instruction, but it does not promote teachers' relatedness or autonomy to explore and innovate classroom instruction (McDonald, 2009). Teachers' social interactions in job-embedded professional development fill a need to support their lack of knowledge instead of have reciprocal support in a community of learners.

Autonomy

What Support is Needed for Teachers' to Use Media Production?

While relatedness and mastery are crucial components to intrinsically motivate teachers to take action, it's not until they feel autonomous that they have the courage to teach. In the context of media production in school, teachers have to be reassured that the playfulness of media production is valued. This kind of support can be best achieved when the school culture is appreciative. Once teachers achieve relatedness, mastery and autonomy, they start to transfer their practice into mentoring others. Autonomy can be defined in many ways but in this dissertation, I consider the work of Deci and Ryan:

Autonomy refers to being the perceived origin or source of one's own behavior. Autonomy concerns acting from interest and integrated values.

When autonomous, individuals experience their behavior as an expression of

the self, such that, even when actions are influenced by outside sources, the actors concur with those influences, feeling both initiative and value with regard to them. Autonomy is often confused with, or melded together with, the quite different concept of independence. (which means not relying on external sources to influences), but the Self-Determination Theory view considers there to be no necessary antagonism between autonomy and independence. Indeed, one can quite autonomously enact values and behavior that others have requested or forwarded, provided that one congruently endorses them. On the other hand, one can of course rely on others for directions or opinions in such a way that autonomy is not experience, as is the case with mere compliance or conformity. In short, independence versus dependence is a dimension that is seen with Self Determination Theory as being largely orthogonal to the issue of autonomy versus heteronomy. (Deci & Ryan, 2002, p. 8)

Pink (2009) criticized the use of terms such as *empowerment* and *flexibility*, claiming that people with power who use these terms grant some control to people below them and that it is still a tool for compliance and not real autonomy. “While control leads to compliance. Autonomy leads to engagement” (p. 108). This is not to say that autonomy and happy interdependence cannot coexist. In order to clarify what autonomy looks like, Pink explained that autonomy is volition over task, time, technique, and team. In each, the teacher should give herself or himself permission and reassurance to take a risk.

Historically, media literacy education began as a need to protect students from the potential risk and harm of media by giving students tools to analyze and critique media messages (RobbGrieco, 2014). Building upon Hall's (1989) decoding/encoding analysis, teachers kept their power to demystify the media messages and transfer the practice of analysis. Buckingham (1998) criticized this historic protectionist approach: "[j]ust as students are assumed to be 'mystified,' so the teacher is assumed to possess the key to liberation" (p. 36). Influenced by Giroux's (1988) and Freire's (1970) critical pedagogy, media educators started to look at media production as a way to facilitate analysis and liberation (Denski, 1991; Goodman, 2003; Kellner & Share, 2007).

Be that as it may, Ellsworth (1989) questioned the reality of practicing critical pedagogy in the classroom as advocated by Giroux (1988) and Freire (1970), who did not address teachers' trust, risk, or fear regarding their autonomy in their classroom. Since the responsibility for the learning process and content is in the hands of the students, many students choose to use this power as a way to express transgressive behavior or content (Grace & Tobin, 1998; Moore, 2011; Parry 2013). Once given the opportunity to be expressive, some students choose to engage in a power struggle with their teacher.

One of the critical pedagogy scholars who offered a solution was Ira Shor (1992). He explained how a student-centered pedagogy develops critical thinking through a set of structured inquiries. For Shor, the role of the teacher is a mediator between the students and the outside worlds. As such, the teacher must balance between "the needs for structure with the need for openness" (p. 16). In order to offer

a democratic participatory pedagogy and address student trust and transgression, the teacher should bring a structured curriculum and negotiate it with her or his students. Shor (1992) explained that “a participatory pedagogy, designed from cooperative exercises, critical thought, student experience, and negotiated authority in class, can help students feel they are in sufficient command of the learning process to perform at their peak” (p. 21).

On one hand, the value of learner-centered pedagogy has been shown to be the most effective toward enhancing students’ learning. On the other hand, we can see challenges such as balancing authority in the classroom and facing students’ transgression and trust issues. Looking at media literacy practice, the structured curriculum of media production with its messy engagement of students is even more challenging. This is why Kellner and Share (2005) used Shor’s (1992) work to explain how media literacy practices can be used as a student-centered, bottom-up approach. They stated that the student-centered approach “is necessary for a standpoint analysis to come from the student’s own culture, knowledge, and experiences” (p. 371). Unlike a behaviorist approach to teaching where the teacher is the center of knowledge, the empowerment approach uses play to connect to the students’ natural curiosity to inquire and learn to be critical.

Permission to Play

The use of play in education is not a new concept. In the 1920s, Vygotsky (1978) explored the use of play with children as a way to examine his concept of the zone of proximate development (ZPD). The ZPD is a mental space where child functions are in a state of development using interpersonal mentoring. Through the

help of a meaningful other, a child develops her or his skills from a primal stage into concrete use. The ZPD has two main goals: to develop and acquire control over cognitive function and comprehension that exists in the child's interest areas and to broaden the zone for those who need it (Kozulin, 2004). According to Vygotsky (1978), ZPD is the zone where the mundane and empirical concepts of a child meet the concepts, theories, and methods of a meaningful other: "It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

Shor's argument was built on Vygotsky's call to challenge students to solve problems that are slightly beyond their skills in order for them to enhance and develop these skills. "[L]earning is not development; however, properly organized learning results in mental development and sets in motion a variety of developmental processes that would be impossible apart from learning" (Vygotsky, 1978, p. 90). In order to learn, develop, and acquire skills learned in the ZPD, Vygotsky suggested using play as a mediating educational tool. "Play creates a zone of proximal development of the child. In play a child always behaves beyond his average age, above his daily behavior; in play it is though he were a head taller than himself" (1978, p. 102). Vygotsky elaborated his definition by stating that "[i]t is the essence of play that a new relation is created between situations in thought and real situations" (1978, p. 104). He described how at first a child experiences an overt imaginary situation and converts rules. Then, as an evolution of the play, the rules become overt and the imaginary converts into a conceptual thought.

In a more recent study on play at the elementary level, Bennett, Wood, and Rogers (1997) explained how in their observations and analysis, the incorporation of play as a pedagogy “did not imply a *laissez-faire* approach, and the amount of curricular free choice was limited. However, the teachers attempted to balance their own intentions with those of the children, in line with shared commitment to choice, ownership and independence” (p. 118). In his third edition of the book *The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom*, Brookfield (2015) added a chapter about the use of play in the classroom. Like previous scholars, Brookfield valued the use of play in the classroom. He pointed out four components to be used in order to have a meaningful and educational outcome from playing in the classroom: student voice, modeling, an aligned reward system, and scaffolding. A classroom that is using pedagogy of play should use students’ testimony for authentic learning; the teacher should be the first to model how it works and what is expected; students should be rewarded upon their participation; and there should be a systematic growth from familiar practice to an unfamiliar practice as students learn to play.

Teachers who use media production as a form of play in their classroom describe it as challenging because of students’ messy engagement, which might not be perceived as learning (Grace, & Tobin, 1998; Moore, 2011; Parry, 2013). This is why when implementing media production as play with a structured curriculum as suggested by Bennet et al. (1997), there needs to be a support system to not only give permission but to reassure that it is valued as an educational practice.

Berliner (2004) explained how teachers must have time to practice while being supported and coached to become expert teachers. By supporting the particular

expertise within the school and its unique context, coaches and specialists promote novice teachers to become experts and stay in the system. Schools vary in their professional development opportunities. US teachers participate in some form of professional development every year (Darling-Hammond et al., 2009). In addition, in their report for the National Staff Development Council, Darling-Hammond et al. explained that there is a lack of funding, and the common professional development focuses on subject matter but not in depth. Assessment of professional development in school will provide not only a measurement of teachers' efficiency but can also help improve the current practice toward the teachers' need to become expert teachers (Goe et al., 2012). In order to implement media production and reassure teachers that they are allowed to play within their classroom, there needs to be not only a support team such as the job-embedded professional development or the community of practice but a whole school integration to allow teachers the autonomy to choose to participate or not.

Whole School Integration to Promote Self-Determined Mentors

Many technology integration initiatives have been developed but often they ignore some essential components of school culture. Technology Together (Phelps & Graham, 2013) is an Australian whole-school professional development model for technology integration that involves most of the school's teachers, administrators, support team members, and students (see Figure 2.4 and Table 2.7). University staff provides guidance and support that was designed through an ongoing research and professional development process that focused on teachers' motivations, effect, and instructional strategies. Participants in the professional development used a spiral

process to plan, teach, observe, and reflect. The professional development team supported teachers by prioritizing a whole-school development, creating a climate for learning, acknowledging and accepting change, increasing teachers' confidence and motivation to use technology, emphasizing immediate learning outcomes for students, and enhancing teachers' professionalism.

Figure 2.4. Metacognitive Model of Technology Together (Phelps & Graham, 2013)

Table 2.7.

Constructs of the Metacognitive Model of Technology Together

Influences	Description
Affects	Mentoring to build self-efficacy Mentoring to decrease computer anxiety Role of support, encouragement and technology use by others Recognizing patterns of learned helplessness and attribution
Motivations	Fostering perceived usefulness Identifying pedagogical orientation Modeling goal orientation
Strategies	Identifying role models Encouraging exploratory learning and playfulness Recognizing memory and retention

Note. Taken from Phelps and Graham's (2013) *Technology Together: Whole school professional development for capability and confidence*.

Engaging the whole school has been efficient in building teachers' confidence in using technology (Phelps & Graham, 2013). The scaffolding of the university professional development changed the teachers' attitudes toward integrating technology in their classroom. It also developed teachers' values of working with technology, although they were fearful of being judged. Above all, it advanced teachers' practice using technology in their class (Phelps & Graham, 2008). Phelps and Graham found that working on a whole-school level was significant even for resisting teachers who were eventually influenced by the change in school culture (Phelps & Graham, 2008). The ability to acknowledge school culture as a starting point and adjust the university support to teachers' needs is the strongest aspect of this model since it is looking at all the factors to support teachers holistically and contextually (Phelps, Graham, & Watts, 2011). In other research on whole-school reform (Muncey & McQuillan, 1996), the results showed how tension between individual and school-wide perspectives can be mediated through professional development if a holistic approach is used. More specifically, a holistic approach promotes trust, value of fairness, generosity, and tolerance that impacts teachers, students, staff, and administrators (Muncey & McQuillan, 1996).

While university support might promote autonomy, the holistic model also creates tension between the goals of job-embedded professional development, school

culture, and school infrastructure (Phelps & Graham, 2008). The university support is a different professional development than the school job-embedded professional development and the community of practice. The role of the outside university expert is to support the teachers' autonomy and give evidence-based research that promotes teachers' volition. Technology Together did not have job-embedded professional development or a community of practice set up in their schools. Each school has its own culture that dictates the effectiveness of the type of professional development (Phelps et al., 2011). Furthermore, university support has to address the worry of administrators of fiscal restriction regarding: teachers' planning time, professional training, and group meetings. Political and social factors can be a barrier, in addition to the cultural and financial challenges (Muncey & McQuillan, 1996). Recovering the tension between the administration's aspiration and the teachers' personal aspiration can enhance teachers' autonomy. Ultimately, having all three—job-embedded professional development, a community of practice, and university support—together in one coherent model can achieve Cuban's (1986; Cuban et al., 2001) call to address teachers', relatedness, mastery, and autonomy, which will promote media production in their classrooms.

Chapter Summary

To implement media production, the teacher needs to have a sense of shared purpose (relatedness), a sense of competence (mastery), and assurance to explore (autonomy) to become a digital literacy mentor. Relatedness can be achieved by having a collegial agreement of educational goals. A community of practice promotes discourse in and outside school. Mastery can be achieved by recognizing what the

educational goals and benefits for students and the teacher are, acknowledging the fear and frustration of practicing media production in the classroom, and understanding that mastering media production means thriving toward constant improvement without reaching full efficiency. A support team, such as specialists and coaches, can give job embedded professional development daily support to implement media production. Autonomy can be achieved through whole-school integration that is promoted by administration, teachers, and the support team. University support can add three important components to professional development: research and permission to take risk as well as mediate between teachers and administration.

However, this model has been constructed from many studies and has not yet been examined as one coherent model. We still do not have a model that explains why different elementary teachers use media production with their students, how they are using it differently in their class, and what they need in order to implement media production in their classes as part of their public elementary school curriculum.

Chapter 3 – Methodology

In this chapter I will describe the multiple case study design using qualitative methods. The chapter will describe the research design, selection of participants, data collection procedures, and analysis that were used to answer the three research questions.

Research Design

The purpose of this multiple case study method (Stake, 1995; 2006; Yin, 2009) was to qualitatively explore why some elementary school teachers practice media production with their students, how these teachers differ in their media production practices in their classes, and what is needed to promote a variety of media production practices in elementary education. I studied eight educators' motivations, practices, and support regarding their use of media production in one Northeastern public elementary school. A qualitative method design was used (Denzin, 1989; Patton, 2015); more specifically, a participatory paradigm of inquiry was used (Lincoln, Lynham, & Guba, 2011). I have been part of the professional development team at Ocean Elementary since January 2014. My prolonged engagement allowed me to get to know the participants well and to use the videotaped interviews and videotaped observations as a collaborative effort to tell their story about their journey to implement media production.

In this study, the Digital Learning Profile (Hobbs & Moore, 2013) was administrated as pre- and post-tests to code participants' self-reported motivations to use media in their classroom, the AACRA (access, analyze, create, reflect, and act) model (Hobbs, 2010) was used to code the videotaped observations of the teachers'

practices, and self-determination theory (Deci & Ryan, 1985) was used to code the videotaped interviews collected during the semester-long inquiry. Using a participatory approach, I triangulated the self-reported data from the teachers' motivation surveys with the videotaped interviews and observations as part of a multiple case study design as I gave the participants professional development sessions.

The multiple case study is a holistic method that combines the benefits of comparing cases and interpreting the motivations, practices, and support (Creswell, 2014). Moreover, it explores a process (media production) in a specific setting (Ocean Elementary) that is going through a current trend (digital technology integration), where I, as the researcher, have no control over the behaviors or outcomes (Merriam, 2001; Patton, 2002; Yin, 2009). This method is useful in cases where there is an opportunity to work in a single educational setting to explore the diversity of the phenomenon (Mama & Hennessy, 2013). The strength of this method is in its exploration of events and situations from the participants' points of view (Fraenkel et al., 2012). Skoretz and Childress (2013) called to add more qualitative information from observations if we want to “increase the accuracy of the data collected” (p. 479).

This inductive method allows the researcher to take particular cases or events, such as the integration of media production in one elementary school, and generalize themes that describe individual meaning and interpretation out of the complexity of a situation (Creswell, 2014). Though the particular studied phenomena cannot be generalized, Lincoln and Guba (1985) offered different techniques to ensure the validity, or in their words, the trustworthiness of the data.

In addition, I found Creswell's description of transformative design (similar to Fraenkel et al.'s [2012] advocacy lens) aligned with the purpose of my study. Therefore, I applied a multiple case study design with a transformative goal (media-production integration). Nevertheless, the lack of agreed upon rigorous procedures to ensure validity questions the authenticity of the collected data. The flexibility of the researcher's role and the interpretations of the emerging themes prevent it from being generalized (Fraenkel et al., 2012). Studying the motivations, practice, and support of eight educators in Ocean Elementary School with its very particular setting threaten the generalizability of the research findings. I also have been working with these educators while I interviewed and observed them. In doing so, my position as a researcher needs to be addressed, as well as my biases, to ensure validity and trustworthiness.

Setting of the Study

Ocean is a white upper-middle class affluent suburban community (see Appendix F). The elementary school is a high-functioning school (Appendix G) that has all the equipment and administrative support needed to implement media production. According to the school district, 90% of the students are white, and less than ten percent are eligible for reduced or free lunch (see Appendix H). It is a high-performing school with 45 full-time teachers serving more than 500 students that serve the greater area of Ocean Town. In January 2012, when I arrived to the University of Rhode Island, I was told by a professor of education to go to Ocean Elementary School since their approach to technology integration was highly advanced. In the summer of 2013, the school's library media specialist enrolled in the

state university's Summer Institute in Digital Literacy that I produced under the leadership of Dr. Hobbs and Dr. Coiro. The library media specialist looked for ways to expand media literacy practices in his school. Because Ocean Elementary School has a vast array of technological resources (Promethean boards, iPads, laptop carts, and cameras), he wanted to utilize this infrastructure to expand media production as a learning tool enhance his students' digital and media literacy. Six months later, he invited me to offer workshops on digital and media literacy practices to the 4th-grade teachers. During these workshops, I met the school's literacy coach, who had just begun to explore how to support digital literacy practices.

As the library media specialist, the literacy coach and I offered these workshops; the literacy coach started to connect digital literacy practices to the Common Core State Standards (CCSS) and gave daily one-on-one support for all teachers modeling the use of digital media with students. Simultaneously, the librarian supported media literacy practices by teaching video analysis and production to teachers. My workshops showcased how to integrate media literacy practices in the classroom. Our collaborative efforts in supporting the digital and media literacy practices helped the school principal convince the superintendent to commit to a whole-district initiative to implement digital literacy in collaboration with the Media Education Lab.

In the summer of 2014, the school district sent thirteen educators to the Summer Institute in Digital Literacy. This was the beginning of the year-long engagement with Renee Hobbs. Faculty and staff participation in the intense weeklong professional development helped the superintendent to make digital literacy

an official initiative of the district. In August 2014, the superintendent and Dr. Hobbs signed an agreement to create a district-wide initiative that included Dr. Hobbs' support of a leadership culture to foster digital and media literacy. In addition, I joined the Ocean Elementary support team to provide technical and curricular support of digital and media literacy.

During the 2014-2015 school year, Dr. Hobbs met with the district administrators for five times in order to implement a comprehensive digital and media literacy program that (a) transforms classroom practice, (b) expands the literacy competencies of all students in the school district through developing communication, collaboration, creativity and critical thinking skills and (c) advances the leadership competencies of educators and researchers in digital and media literacy education. In addition, Dr. Hobbs provided four professional development days in digital and media literacy for each school. Each school was asked to identify a group of educators who would like to become the school leaders in digital and media literacy. That group was called Catalyst Teachers.

At Ocean Elementary, the book club group morphed into the Catalyst Teacher group that included twelve members. As being part of the support team, I participated in the four professional development days. All eight participants of this research study took part in the Catalyst Teachers' activities. As part of their leadership, the Catalyst Teachers took responsibility for planning the school faculty professional development day on March 6th, 2015.

During the 2014 fall semester, I came to the school twice a week to support digital literacy integration by giving one-on-one mentoring sessions, giving

workshops, brainstorming with administrators, and providing technical support.

Starting in the 2015 spring semester, I transformed into the researcher: I interviewed, observed, and sometimes technically supported the eight participants.

Because of the uniqueness of implementing a whole-school media production model with the University of Rhode Island (URI) Media Education Lab's support, along with job-embedded professional development of the support team, the research data cannot be generalized. Furthermore, the small sample of teachers reported on in this dissertation is not representative of any population; my position must be controlled since I have a history and relationship with each participant. To address these threats, I used Lincoln and Guba's concepts of *transferability* because my multiple case studies were within one school, which I was a part of, and could not be addressed using either experimentalist or criticalist strategies (Lincoln et al., 2011). Transferability means that instead of generalizing the findings to the greater population, the data can be transferred to other similar contexts (Creswell, 2014). The particular story of each case study may help other teachers to choose their path to implement media production. Each participant had a different motivation and a different practice of media production with their students. Other educators might relate to one motivation and not to the other as well as to the practice of one teacher and not to another type of practice. What is more, this exploration showcases a new model of successful whole-school media-production integration, and other schools can learn from it and apply the relevant parts of the model to their own context.

The Role of the Researcher

In case study research, researchers must disclose their subjectivity to clarify

how their experiences shape their interpretations of the data (Creswell, 2014). My eighteen years of experience as a media maker and teacher shaped my assumption that media production enhances learning and can be taught in any subject matter and any grade level. While my subjectivity threatens the validity of my analysis, my year-long work at Ocean Elementary School is a valuable asset to the study. In the school, I was identified as the media-literate person who supported implementing media in the classroom. Being part of the support team labeled my intentions and my position of supporting media-production integration with the school faculty. In January 2015, at a faculty meeting, I announced to all faculty that I would be conducting research and would be in contact with the research participants. This was a result of a negotiated agreement between the administrators and the support team to make sure that my research identity was clear to everybody and that my role as a support team member to the whole school ended as I started to collect data and work only with the research participants.

In my first official meeting with the digital-literacy team, I received a shirt, a folder, a keychain, and a rubber bracelet that symbolized becoming a part of the school culture. During the first two months, it took time to understand what was expected from me and for the school staff to know what to ask for. After a series of workshops and one-on-one support, a group of teachers was in contact for advice and had technical questions. The support team members wanted resources and to brainstorm on their idea of how to use media production for their subject matter. The administration wanted to brainstorm how to support all teachers, even those who were most resistant to digital-literacy integration in their classroom. It was important by the

end of the fall semester of 2014 to clarify my role and the support team's role. After a semester of collaboration, before I became a researcher, the literacy and math coaches were looking into curriculum and CCSS integration with digital literacy. The library media specialist gave technical and artistic support for media production initiatives, especially for 3rd and 4th grades. A core group of twelve Catalyst Teachers were giving ongoing content and tech support, and I was providing more tech support and sometime also advising about curriculum design and instructional strategies with technology.

The relationships with the school staff and our constant engagement affected my data collection and analysis while it influenced the research participants to practice media production. Being an outsider who was not a paid staff member or connected in any way to the teachers' evaluation process allowed me to have critical distance from both the teaching and the support team. My unique position, being regularly accessible to the participants and a known face in the school, helped participants to be open as to why and how they could use media production in their particular classroom. The behavior specialist said:

“Grace (math coach) and I wanted to use media because you were coming in. And we used it. But I probably wouldn't have done that normally. You know what I mean? Like, I would not have actually thought of that if you were not coming in.... It was great that we did it. (Abbie, second interview, 05.21.2015)

As seen from Abbie's quote, it is also possible that faculty and support staff experienced some feelings of pressure to satisfy my research agenda or otherwise

actively support my research; for this reason, I used semi-structured interviews, triangulation, and, most importantly, I clarified my role as a researcher to the staff before starting the research at a faculty meeting and before starting the individual interviews. During the February 4th, 2015, faculty meeting, the principal announced to the faculty that I would no longer be part of the support team and that I would work solely as a researcher. While teachers who participated gained deeper reflection as part of the research, I was no longer actively supporting digital literacy integration. During the spring semester of 2015, I was able to concentrate on documenting participants' existing motivations, practices, and support while exploring how they designed, implemented, and assessed media-production activities. My unique position as a researcher and mentor allowed me to take advantage of my background knowledge, and participants were able to share their experience and knowledge without feeling pressured to perform for their evaluation. In some cases, participation in the research was a personal commitment to advance the participants' own practice by having me observed and provide reflection. In an interview, the 4th grade teacher said:

After spending the week at the URI Summer Institute, I was certainly inspired to do more with technology, and I enjoyed working with you (the researcher) and felt that that would be helpful for me and to learn some more. I also felt it was a little outside of my comfort zone, which I do not do too often. So I felt that I needed that experience of pushing myself a little bit further. (Sarah, focus group, 05.26.2015)

Whereas sometimes participants did special activities for the research, though I asked them not to, they reflected that it did promote their practice and pushed them even more to use it. Retrospectively, it was helpful and promoted stepping out of their comfort zone. Going back to Creswell's (2014) description of transformative design, this research advocated for using media production. This qualitative study did not pretend to be objective or neutral. On the contrary, this was a study for the purpose of advocating why media production is important in elementary school. My unique position at the school and the particular context of each one of the eight participants might be inapplicable for other educational settings. Nevertheless, I hope that other educational settings might find useful and relevant parts of information to implement media production.

Methodology and Procedures

Description of Professional Development and Key Concepts

The data collection started in the end of January until the end of the school year on June 22nd. As part of the digital literacy initiative, all full-time teachers took the Digital Learning Profile survey (see Appendix E) during the first faculty meeting on October 1st 2014. An ad hoc group of twelve full-time teachers volunteered to be part of the Catalyst Teachers group that advanced the digital literacy initiative in the school. They participated in four meetings with Dr. Hobbs, two during the time of the research. During these four-hour-long professional development sessions, Dr. Hobbs introduced media production activities (such as making a thirty-second video) as well as viewing and discussing examples of other schools that implemented media production in their curricula and practice. Hobbs' (2010) AACRA (access, analyze,

create, reflect, and act) model (see Figure 1) was introduced to the teachers, as well as other digital literacy practices such as TPCK (technology, pedagogy, content-knowledge) (Mishra & Koehler, 2006) and SAMR (substitution, augmentation, modification, and redefinition) (Puentedura, 2010). The Catalyst Teachers were giving workshops for other teachers in the school; for example four different mornings in February before school, they shared their growing expertise with other teachers. Also, during professional development day on March 6th, each one of the participants offered a session during an Un-Conference style professional development.

Eight educators volunteered: four teachers and four support team members. All were part of the digital literacy initiative and identified as Catalyst Teachers. They were interviewed four times (two individual interview and two focus groups) and observed three to five times depending on the variety of their practice. All took the Digital Learning Profile survey (see Appendix E) in March. Interviews were conducted during the end of January and March (see Appendices A and B). Observations and secondary interviews were done between February and mid May. The two focus groups were conducted during May and June. The data analysis was done during data collection, starting in March till the end of July. As part of participation in the research and the professional development, the eight participants reflected on the preliminary findings and suggested their feedback. Appendix J offers a timetable of both the professional development and research process.

Study Population and Location

During the first faculty meeting on October 1st, 2014, all full-time teachers filled out the digital learning profile survey (see Appendix E). At the January 7th, 2015 faculty meeting, 36 full-time teachers filled out a questionnaire about their use of digital technology and media production. As seen in Table 3.1, most of the teachers used the Internet at least once a day and used their Promethean boards several times a day, but a small percentage used media production at least once a week, and hardly any teachers used video recording in their instruction.

Table 3.1.

Self-Reported Frequency of Using Technology on a Five-Point Likert Scale

How often are you using media production in your classroom?	How often are you using the Promethean board in your class?	How often do you use Internet during your classes?	How often are you showing videos in your class?	How often are you using video recording during your class?
1.9	4.125	3.696	2.718	1.212

Note. Survey taken during faculty meeting on January 7, 2015

Sampling Procedures

The purposive sample (Fraenkel, Wallen, & Hyun, 2011) of four teachers and four support-team members provided a glimpse of the particular implementations of media production at Ocean Elementary. Out of the 45 full-time educators (25 certified teachers, 11 support-team members, and 9 related service providers), eight volunteered to participate in the research. All participants were part of the Catalyst Teacher group for digital literacy. As I documented these meetings and supported the group members' work, we established a professional relationship to advance the

implementation of media production in their teaching. The Catalyst Teachers group had 12 members. Four of them did not volunteer because of time commitments, lack of interest, and union issues that will be explained in Chapter 7.

Patton (2002) described three main limitations of sampling in qualitative research: situation, time, and people. The selection of the particular sample and the omission of other situations, other times, and other people might impact the findings because of the narrow and specific focus on one case while excluding potential influences. Indeed, this research, as described before, has a transformative design (Creswell, 2014) that encourages other settings to use this documentation of the successful experience and limitations of Ocean Elementary staff and students. After signing the consent forms, the participants invited me to come and observe when it suited them during a period of three months. The interviews and focus groups were scheduled at intervals of several weeks to make sure that the responses would not be affected by particular events (Seidman, 2006). Sampling was purposive in order to select the most proficient educators practicing media production in a suburban public elementary school. Each participant had a professional relationship with the researcher, and being involved in the professional development initiative at the school for almost two years gave me the opportunity to have a deeper context that I otherwise would have missed.

Introduction to Teacher Participants

As part of my intention to give the participants a voice, I gave them the opportunity to choose their own pseudonyms since according to the IRB consent form their participation was confidential. Sarah, Isabella, Sophia, Charlotte, and Diana

chose their pseudonyms while I chose for Rachel, Grace, George, Abbie, and Barbara.

Sarah. Sarah, a white woman in her late fifties, was the lead teacher in 4th grade and the most experienced of all the other fourth grade teachers. She had been a teacher for more than 20 years. She started as a teacher's assistant and became a full-time teacher. When asked to define media production in the context of elementary education, Sarah explained it as "creating an on-line poster that includes audio, images, and possibly videos is one type of media production. Creating videos, slideshows, and PowerPoints are also media productions" (online survey, 3.8.2015). When I asked why she volunteered for this research, Sarah explained that it pushed her to explore new instructional strategies. At the last videotaped interview, I asked all participants how it felt to be observed and interviewed using a video camera, Sarah responded:

...I was definitely uncomfortable [laughing]. But I felt like it was outside the comfort zone...that's what we are going for here.... It kept me kind of focused and made me think about those questions—think about what I'm doing and why I'm doing it. So, in that sense it was helpful. (Sarah, third interview with George, 06.17.2015)

Isabella. Isabella, a white woman in her early thirties had more than ten years experience as a special educator. She was a 4th-grade special-education teacher who co-taught with Sophia. They had known each other for four years, when they were introduced to teach in an integrated classroom in the third grade, and they had been co-teaching since then. Isabella grew up in a family of teachers and wanted to be one

since she was a child. For her, media production is “planning, evaluating, producing, and sharing information” (individual interview, 03.24.2015). She took part in the research because she was “curious about what exactly you (the researcher) are doing. I just cannot wait to see the finished product” (Isabella, focus group, 05.28.2015). Regarding being filmed during the interviews and observations, Isabella explained, “[I] don’t really think much of it, although sometimes I get nervous because I wanna make sure I am clear in how I am presenting my teaching” (Isabella, third interview with Sophia, 06.18.2015).

Sophia. Sophia, a white woman in her mid thirties was a 4th-grade teacher who came to the school five years ago from a middle school and had more than twenty years experience as a teacher. She had a M.A. as a reading specialist and wanted to be a teacher because she loved to work with children. She stated that she always thought of a camera when she heard of media production. She defined it as “a movie, a camera guy, a producer. I am more of a director or the writer—not so much the one who does the other stuff” (Sophia, first individual interview, 03.20.2015). She volunteered to do the research to “learn about how to use technology in the classroom and what it really means” (Sophia, focus group, 05.28.2015). Sophia agreed to be filmed during the interviews and observations, though she did not like it:

Sophia: Yeah, I don’t like to be filmed.

Researcher: Did it affect you when I was here?

Sophia: No. Cause it’s you. I know you. I was ok with it. But like if someone came in another time and said: “Do you mind if I film you?” I would say

“yes” to help them, but I wouldn’t really like it. (Sophia, third interview with Isabella, 06.18.2015)

Like the other participants, our previous work together created trust that allowed me to come and videotape their unique practice, though it was not always pleasant.

Rachel. Rachel, a white woman in her late twenties had been a 2nd-grade teacher for the last two years, with a total of eight years experience as an elementary teacher. She taught other grades prior to being a second grade teacher. She grew up in Ocean town and graduated from the same elementary school. She was inspired by her 6th-grade teacher and her high school teacher to become a teacher herself. After finishing her B.A. in elementary education and receiving a special-education certificate, she joined the faculty of the school. Her high school teacher introduced her to project-based learning. She defined media production as “the creation of a product to share with the world” (online survey, 03.24.2015). She volunteered for the research since she wanted to share and advocate her work with other people (Rachel, third interview with Charlotte, 06.15.2015). As for being filmed for the interviews and observations, she stated, “It didn't bother me. Not really, I mean...I don't know. Whatever was going to happen was going to happen whether you had that video camera in my face or not” (Rachel, third interview with Charlotte, 06.15.2015).

Support team members. Charlotte, the literacy coach, a white woman in her mid fifties, had more than fifteen years of experience in adult education and coaching. Her expertise and professional relationship with the staff got the fourth grade teachers to adopt the digital literacy initiative in the 2013-2014 school year. Grace, the math

coach, a white woman in her mid forties had been the math coach at Ocean Elementary since 2013. Her exploration for a new method to enhance the math skills of the students improved her and other teachers' media production practice. Abbie, a white woman in her mid thirties was a half-time behavior specialist and half-time special educator. She worked on many initiatives for special education and positive behavior interventions and services (PBIS). Since 2014, she decided to integrate media production as part of her PBIS at Ocean Elementary. George, a white man in his mid thirties was the library media specialist with experience as a professional cameraman. This experience helped him design a media-production studio in the school library. As described earlier, reaching out to the URI Media Education Lab started the school initiative to implement digital literacy, especially media production. Diana, a white woman in her mid forties, had been the school principal for eight years when she received the state award for her leadership as principal during her first year at Ocean Elementary. As principal, she modeled the use of digital literacy as she connected to students, teachers, staff, parents, and community stakeholders.

Data Collection Sources and Timetable

Between January 23rd and June 22nd, 2015, I was at Ocean Elementary for 38 days. During the six months of interviews and observations, I collected a total of 14:16:33 hours of videotaped interviews and 19:14:19 hours of videotaped observations. Each participant was interviewed four times.

Videotaped interviews. I combined Seidman's (2006) three-step interview structure for each of the eight participants (see Appendices A and B) with Krueger and Casey's (2009) technique of focus groups (see Appendix C). Seidman suggested

conducting three interviews to achieve a deep understanding of the phenomena and reflect on analysis as a way to address threat to internal validity. The first interview with each participant focused on introduction and life history and was conducted during March 2015.

The second interview delved into details of the participants' experiences using media production. For the purpose of being informed by the observation, all second interviews were conducted in May after I finished the videotaped observations. Since Isabella and Sophia worked together, I decided to have both participated in the second interview together. While the first interview provided an individual perspective, the second interview provided the participants' interpretations of their practice. For that reason, it was important to have the co-teachers be interviewed together.

I wanted to have a focus group to document the culture of community of practice at the school before the final interview. The two focus groups were conducted in the last week of May after I finished conducting the second interview with all participants. Initially, I planned to have one focus group with the four teachers and one focus group with the support group. However, since the community of practice is reciprocal and the support group is also supported by the teachers, I decided to blend the two groups and offer two times that would work for almost everybody. In the first focus group, Sarah and the two coaches, Charlotte and Grace, participated. Rachel, who was supposed to take part, was sick that day and did not come to school. In the second focus group Isabella; Sophia; George, the library media specialist; and Abbie, the behavior specialist, participated.

The third interview was a reflection on preliminary findings and analysis. I conducted the last interview during the last week of school before everyone went on the summer break. During the month of May and early June, I transcribed the previous interviews. Then, I analyzed the transcripts and the videotaped observations during the month of June. The data was synthesized into the self-determined pyramid model (see Figure 2.3).

At the last interview, I shared the model as it applied for each participant in order for them reflect and suggest adjustments if needed. As part of a member-check strategy (Creswell, 2014; Fraenkel et al., 2012; Merriam, 2001; Roman & Apple, 1990; Seidman, 2006), the participants reviewed and provided feedback. Once again, because of the reciprocal nature of the work at Ocean Elementary between the teachers and their support group, I decided that the third interview would be in pairs. The analysis of the focus groups and the second interview with the co-teachers indicated that the dialogical nature of the interviews was useful to collect deeper information than the individual interviews. In their last interview, Isabella and Sophia reflected on their focus group experience:

Researcher: Did you learn something from the interviews, focus groups and observations that I did?

Isabella: I think for me when we got together in the library with the other teachers it was really nice 'cause I could hear other perspectives and it kind of helped to build my perspective and shape things, and just kind of think out of my own box. Just hearing that was really helpful for me.

Sophia: Yeah, and you feel like you already know people, and what they are gonna say, but some things people said I was surprised about.

Researcher: Like what, you remember?

Sophia: Like what Abbie was saying. ‘Cause I don’t really get to talk to Abbie a lot and really know exactly what she was doing, but I really liked her talking about the PBIS in the beginning and how she was working with you to make that happen. ‘Cause the result of that was awesome; I did get to see that, when she showed us the videos. But the whole process that she went through, I was really impressed with that. (Isabella and Sophia, third interview, 06.18.2015)

This is why, for the third interview, I asked the participants with whom they wanted to have their last interview, and they decided to pair up in the following dyads: Sarah and George, Isabella and Sophia, Rachel and Charlotte, and Grace and Abbie.

Videotaped Observations. For observations, I used Goldman-Segall’s (1998) method of documentation in a participatory approach. I decided to follow her advocacy to use video recording as a way to have thick description (Geertz, 1973), although the practice of using video is “messy, slippery, and elusive” (Goldman-Segall, 1998, p. 25). In addition to the fact that I am a filmmaker, I advocate for integrating media production in school; the use of videotaped observation allowed me to follow the observed teacher and capture moments that would be difficult to describe on an observation notepad.

All participants signed a permission form to be videotaped. Before coming to their classroom, I explained that I would use a small flip camera and that I was focusing only on the observed teacher. I made sure every time I started the recording

to state that at any time they could tell me to stop, which never happened. Each videotaped observation started when the class with media production practice started and ended when the activity ended. Depending on each participant, the duration would vary from fifteen minutes to an hour.

The purpose of the videotaped observations was to triangulate the information from the interview and the survey. I wanted to document the practice of the teachers, analyze it, and have a discussion during the interview to interpret their work.

Goldman-Segall (1998) explained that using video does not change the role of the researcher to analyze and make meaning from footage, but at the same time, the technology brings a mediated experience that is different than observing and writing field notes. Eisner (1991) advocated the use of artistic and messy processes for qualitative research in education because the result “should show the same connoisseurship as do works of art” (p. 193). Building on Eisner’s argument, Goldman-Segall stated that using videotaped observations enable a close look at some elements of a situation (behavior and context) that would be very challenging to write down or audio record. Decoding the videotaped observations thus reveals the silent voices that other forms of data collection may omit.

Willett (2011) described the limitations of using videotaped observation with children when stopping them in the middle of an action in the playground and asking for reflection. In my videotaped observations, I followed the teacher, and the few times I asked a question was only if it seemed non disturbing and if it was crucial for the continuation of the recording. For example, when Rachel gathered the students for snack time, I was wondering if the activity had ended, but it was a snack break where

she continued to engage in the analysis of the story they read. In a different situation, where Sarah and her kindergarten friend had technical issues, I did not intervene to focus on the documentation, as I explain in Chapter 4. When Isabella walked between her intervention room and the classroom, she talked to me to share her enthusiasm about the work the students did.

Digital Learning Profile survey. The survey maps teachers' differing motivations to use media for learning. In 2010, Hobbs, Grafe, Boos, and Bergey tested 156 Likert-scale items with 350 German and US teachers. Later, Hobbs and Moore (2013) adapted the instrument, creating six conceptual themes each with an empowerment and protection valence, related to teachers' motivations to use media in their classroom (see Figure 3.1). The instrument measures twelve motivations, each with four Likert-style items on a 48-item survey (see Appendix E). Each one of the twelve motivations has two empowerment items and two protectionist items. The survey rates the strength of the twelve motivations according to the summed scores and displays a visual ratio to depict the relationship between empowerment and protectionist attitudes. In a validation study, Hobbs and Tuzel (2015) administered the survey to 2,820 Turkish educators, demonstrating that social studies, language arts, and information communication and technology (ICT) teachers each have a characteristic profile as Activists, Alts, Demystifiers, Tastemakers and Techies.

Learner-centered: Spirit Guide and Motivator

Understanding Media Systems: Watchdog and Demystifier

Figure 3.1. Constructs of the Digital Learning Motivation Profile (Hobbs & Moore, 2013).

As shown in Appendix E, the profile of Motivator has two empowerment items: items (a) Young people need to be inspired to be creative in any way that they see fit; and (b) I am a catalyst for my students' creative energy and help them be the best they can be. There are two protectionist items: (a) I worry that students are not given the opportunity to really speak their mind in school; and (b) Students who are not engaged, motivated and connected to school culture are at risk of failure.

Spirit Guide had also two empowerment items: (a) Talking about media should help students feel better about themselves and get through the highs and lows in life; and (b) When I use media or technology in the classroom, I listen and notice what my students think and feel about it. The Spirit Guide profile includes two items for protect: (a) I want my students to feel comfortable confiding in me even if they don't feel comfortable telling others; and (b) I worry about how media affects the social and emotional well-being of children and young people. Each item can be ranked from 1 to 5 on a Likert scale. The score would identify both if the teacher tends to be more empowering or more protecting and if this motivation is stronger than the other eleven motivations.

In their study, Hobbs and Tuzel (2015) validated the survey by showing a statistical significance of teacher professional identity and their motivation profile. They explained the structure of their scoring:

The digital learning motivation instrument uses an algorithm to identify an individual's profile. Participants receive a score from 20 to 100 for each of the 12 profiles. A participant who rates all four profile items as *not important* receives a score of 20 and one who rates the same items as all *very important* receives a score of 100. We used each participant's highest score from among the set of 12 scores to determine an individual's profile. In cases where there was a tie between two top scores, we examined the range in terms of the determination of the most dominant type of motivation. We determined that the motivation profile with the narrower range is more dominant since the

narrowing of the range interval makes it more difficult to place in that area. (p. 7-9)

The participants took the survey on the October 1st, 2014, faculty meeting with the rest of the faculty members in order to help the support team map the motivations and strategize how to organize the professional development. The results were put on a poster in the support team room, where my desk was. After the beginning of the research, the participants took the survey again, this time as part of the research, with a link that I sent them. During the first interview, each participant was introduced to the October results and the new results and was asked to comment on the differences if there were any.

Teachers' Twitter feed. Brennen (2013) explained that digital media, including Twitter, “are produced under specific political and economic conditions, and that any or all of these cultural products can provide us with insights about our society at a particular historical place and time” (p. 2). Twitter is a free, open-access, social media that shares posts (tweets) with anybody who wants to follow. Unlike other social networks such as Facebook or LinkedIn, it is a free and open to anybody to follow any user. This is why Twitter was used in this study as an unobtrusive measure (Webb, Campbell, Schwartz, & Sechrest, 1966). Similar to archival materials, Twitter is an open source that is not collected by observations or interview.

In order to strengthen the trustworthiness of the research and triangulate between more than just the observations, interviews, and survey results, I decided to look for tweets that would reiterate visually and in text what the participants said in an interview or what I observed in class. In her research of teenagers' use of social

networks, boyd (2014) explained that the digital environment creates new interactions, and she saw them as affordances. For boyd, social media affordances are persistent, visible, widespread, and searchable. For the teacher participants, especially for Isabella, Rachel, and Charlotte, Twitter was a source of agency. They shared, connected, questioned, and supported each other. The community of practice at Ocean Elementary benefited from and communicated via Twitter. After an initial session led by Dr. Hobbs and another session led by me, many teachers at school started to use Twitter to communicate; even the superintendent opened an account and started to share and compliment teachers online.

Students' artifacts. While students were out of the scope of this research, I analyzed several students' artifacts from the various activities in order to validate the educational goals of the teachers. The purpose of using student artifacts was to triangulate between the declared purpose of the activity in the interview with the observed process of the media production activity and the result in the form of the artifact. For example, in order to see the results of the learning process during the students' synthesis in Sarah's class, I looked at several multimedia posters from the history class to see how they used various forms of texts to create a narrative story of the figure's impact.

Data Processing and Data Analysis

I started to analyze the data while observing and interviewing. As recommended by Merriam (2001), I simultaneously gathered data and analyzed it as part of doing a case study research in education. This allowed me to revise my observations to make sure I gathered the activities and to use the data from the

observations to ask for clarifications during the interviews. In the 2015 spring semester, I observed using video recording device throughout all phases of the research process. During the first three months of interviews and observations, I triangulated the three data sources (interview transcripts, videotaped observations, and questionnaire results) to create a chart (Patton, 2015) for each participant's motivation, practice and support.

For this research, I used a narrative analysis (Holstein & Gubrium, 2012) to explain the phenomena of integrating media production in one Northeastern public elementary school. Yin (2009) described five different analysis strategies for case studies. The most appropriate one for this research was explanation building as a type of pattern-matching technique: “[t]o explain a phenomenon is to stipulate a presumed set of casual links about it, ‘how’ or ‘why’ something happened” (Yin, 2009, p. 141). Since I chose the emic approach to tell the story of the integrating teachers at Ocean Elementary, the narrative analysis provided me a framework to tell the chronological process of their struggle to successfully integrate media production. As can be seen in Table 3.2, I changed the original themes as I collected the data and analyzed it. I decided to use the Digital Learning Profile survey to have a common base to examine the teachers' motivations. The interviews provided me the teachers' stories of why, how, and what happened in the last two year at the school. Furthermore, the transcripts of the interviews showcased the teachers' perception as they shifted their pedagogy and started to use media production. The videotaped observations documented their practice in real time in their classrooms. Adding the students'

artifacts and the teachers' Twitter feeds provided additional evidence to describe the teachers' process of becoming digital literacy mentors.

Initially, I started with the analysis of the Digital Learning Profile and the teachers' use of the AACRA model. I compared between the participants' results from the digital learning profile survey taken at the full faculty meeting in October 1st, 2014 as a pretest with the participants' results of the survey from March 2015 as posttest. The comparison allowed me to see if there was a change that happened during this six months period of the professional development initiative at school. I used this analysis for the first interview with each participant. As they reviewed their motivations, they started to mention the collaboration and support from their peers that affected their motivations. Furthermore, I started to make observations in their classroom after the first interview to identify their use of the AACRA model. During these initial observations, I saw different types of collaboration with other faculty, support team members, and students. The strong effects of the community of practice and its relation to the teachers' motivations and practice made me look for a theoretical framework to explain these relations.

I applied Yin's (2009) explanation building as a pattern-matching strategy. It helped me comparing the data from each teacher while still collecting additional data. I found that generally there was a similar pattern for all teachers. It was only during the second month of observations, after conducting the first interview and comparing the teachers' motivations that I looked at self-determination theory (Deci & Ryan, 1985). This theoretical framework helped me explain the relationship between the teachers' shift as they took part in the school community of practice. I looked at the

teachers' motivational change as been affected by relatedness. The first interview reflected the connection between the sense of relatedness and shared goals with the teachers' motivation to use media production. In addition, I started to see a connection between my observed community of practice in the teachers' classroom and their sense of mastery (competence). The teachers used the AACRA model as it was modeled and practice with their peers or support team members or by the professional development as catalyst teachers. In each observation, I saw the teachers' tenacity to overcome challenges, which was connected to Pink (2009) description of sense of mastery as becoming self-determined. In the next months of observations, I paid special attention to both the use of the AACRA model as well as the community of practice and the teachers' tenacity.

By applying self-determination theory in the last observations, the focus groups, and final interviews, I was looking at relatedness, mastery, and autonomy. In the second interviews I asked about the community of practice, overcoming challenges and being tenacious. With the transcript of the focus groups, I was able to triangulate between the different stories from each participants into a coherent frame of Ocean Elementary's community of practice. I observed the teachers' determination to use media production in a variety of forms. The teachers' use of media production showcased a pedagogy of play and structure that was connected to their autonomy. Although I originally had planned to conduct a third interview with each participant, I decided instead to conduct a paired interview. Since the last interview was designed as a reflection on the process with a member check to invite participants to review my initial analysis, I preferred to have the participants chose a partner from among the

research participants. It allowed me to delve into the process of collaboration that strongly emerged from the first interview and first observations.

In the last interview, I wanted to check my theory that there was a narrative process to the participants' journey to integrate media production, and I used a member-check strategy (Creswell, 2014; Fraenkel et al., 2012; Merriam, 2001; Roman & Apple, 1990; Seidman, 2006) to validate with the participants. Once I put the data into a chronological chart of variables (Patton, 2015), I could see how each participant's unique journey to become a digital literacy mentor followed the self-determination pattern. While Deci and Ryan (1985) did not see relatedness, mastery (competence), and autonomy as a hierarchical model, my initial analysis showed three clear stages of creating a sense of shared goals to use media production, practicing the mastery of media production, and a sense of reassurance to use play and structure with media production. While I initially thought that teachers should feel competent and only then work with their peers, my interviews and observations showed that first the teachers had to have a sense of shared goals and only then a sense of mastery emerged.

After the data collection was completed in the last week of June, I started to gather all the data into a narrative for each participant. First, I analyzed all the transcripts of the interviews including the focus group and put them into a chronological order. Second, I used the data from the videotaped observations to triangulate with the interview quotes. Third, I added the results from the Digital Learning Profile surveys. Fourth, I asked teachers to share students' artifacts to triangulate the interview and observational data. However, some of information was

missing, especially as to the timeframe and the chronology of their classroom practice. Fifth, I looked at the teachers' Twitter posts regarding their use of media production in their classroom. Once all the narrative elements were coherent, I was able to create a more elaborate self-determination model of teachers' processes of integrating media production. This analysis described the teachers' hierarchical and chronological process of shifting their motivations, practice and support. The model presented in Table 3.2 describes the iterative process of data analysis as I constructed the data and the theoretical formulation to reveal narratives of how teachers became self-determined digital literacy mentors.

Table 3.2.

The Process of Data Analysis

Timeframe	Original Themes	Data Sources	Revised Themes
October 2014	Motivations	Digital Learning Profile	
March 2015	Motivations	Digital Learning Profile	
March 2015	Motivations	1 st Individual Interviews	Community of Practice
March-April 2015	AACRA	Observations	Community of Practice + Tenacity
May 2015	Community of Practice + AACRA + Tenacity	2 nd Individual Interviews	Mastery Relatedness

June 2015	Mastery	Focus Group	Relatedness
	Relatedness		Mastery
	Reassurance + Play		Autonomy
June 2015	Relatedness	3 rd Paired	
	Mastery	Interviews	
	Autonomy		
July 2015	Relatedness	Students' Artifact	
	Mastery	Teachers' Tweets	
	Autonomy		
July 2015	Relatedness	Describing Each	Becoming a Digital
	Mastery	Participants'	Literacy Mentor
	Autonomy	Narrative	

Preliminary Organization and Analysis

The data was stored on one password-protected laptop on one folder that was divided into sub folders for each participant. In each participant's folder, there was a screenshot of their digital learning profile results; the video files from their interview and observations; a Word file of the interview transcriptions; and additional materials such as videos or pictures of students' artifacts, screenshots of tweets, or grading rubrics. Most of the data was video files from the interviews and observations. The results from the survey were downloaded in one spreadsheet from the Google Form result file. Each file was coded with the teacher's name, the content, and the date of the activity.

In order to analyze the data, I used Elan 4.9.0, free software that allows color-coding of video files and the addition of transcripts. Four figures (3.2.1 – through 3.2.4) show the use of Elan software for decoding and analyzing interviews and observations. For the transcription of all videotaped interviews, I use the online software Transcribe (<https://transcribe.wreally.com/>), where I uploaded the file and used voice recognition to dictate the text or write it on the web-based software that was autosaved. I used a Word document for each participant to back up Elan and color-code it to use it later when copying the quotes. While analyzing on the computer, there were four windows open: Elan, an Internet browser on Transcribe, a Word document, and the coding scheme.

Figure 3.2.1. Sarah's Second Interview Analysis on Elan 4.9.0

Figure 3.2.2. Isabella's First Interview Analysis on Elan 4.9.0

Figure 3.2.3. Sarah and Charlotte s Third Observation Analysis on Elan 4.9.0

Figure 3.2.4. Abbie's First Observation analysis on Elan 4.9.0

Variables of Interest

My three variables of interest were relatedness, mastery, and autonomy. All three variables focused directly on media production, which is a broad term that encompasses a process of articulating a message thoughtfully using a specific medium to effectively distribute it to a target audience (Burn & Durran, 2007). In many cases, media production means video production; however, the product is a result of five stages (Ohler, 2013) that results in any sort of mediated communication, such as online writing, podcasting or screencasting, composing a webpage, creating a newspaper or magazine, etc. In my study, I documented all forms of media production that occurred in the participants' classrooms. Table 3.2 describes the different variables and their construct as I used them for the coding scheme.

First, to measure participants' relatedness, I analyzed the difference between their digital learning profile survey results from October 2014 and March 2015. For

each participant, there were three motivations and a ratio between protection and empowerment. Each motivation showed the educational focus: learner-centered, understanding media systems, focus on texts and audiences, community connection, focus on content and quality, and tool or format focus. I analyzed how participants' sense of shared goals was formed as they related to another person in the school and agreed on their educational goals. Their collaboration was analyzed according to the activity and work together.

Second, I measured the participants' mastery by applying the AACRA model (Hobbs, 2010) of the five digital and media competencies: access, analyze, create, reflect, and act. Each competency has an observable and measurable definition as seen in Table 3.2. In addition, I added two observable and measurable constructs: the active process of being tenacious in front of the challenges and the passive perseverance to cope with the participants' own trepidations.

Third, I measured teachers' autonomy by analyzing their sense of reassurance by authorities to integrate media production. I analyzed the balanced between the structured lesson plans and instruction verses the use of play that was incorporated in the lesson using media production. This was measured by the amount of control that students had and freedom given by the teacher.

Table 3.3.

Coding Scheme of Constructs for Data Analysis

Variables	Constructs		Definition	Observable
Relatedness	Motivations	Spirit Guide Motivator	Learner-centered	

		Watchdog Demystifier	Understanding Media Systems	
		Alt Trendsetter	Focus on Texts & Audiences	
		Activist Teacher 2.0	Community Connection	
		Tastemaker Professor	Focus on Content & Quality	
		Professional Techie	Tool or Format Focus	
		Protect	Concerns about media influence on children	
		Empower	Exploration of media as a communication tool	
	Shared Goals		Who shared the same educational values?	
	Collaboration	CoP	Who collaborates and in what degree?	
Mastery	Competence	Access	Finding and using media and technology tools skillfully and	Usage Exploring Finding

	sharing appropriate and relevant information with others	Supporting
Analyze	Comprehending messages and using critical thinking to analyze message quality, veracity, credibility, and point of view, while considering potential effects or consequences of messages	Questioning Researching Evaluating Calculating Schematizing
Create	Composing or generating content using creativity and confidence in self-expression, with awareness of purpose, audience, and composition techniques	Writing Drawing Designing Composing Filming Brainstorming Planning
Reflect	Applying social responsibility and ethical principles to one's own identity and lived experience, communication behavior and conduct	Feedback Editing Revision Discussion
Act	Working individually and collaboratively to	Presenting Online sharing

			share knowledge and solve problems in the family, the workplace and the community, and participating as a member of a community	Problem solving
	Process	Tenacity	Active	
	Trepidation	Perseverance	Passive	
Autonomy	Reassurance		Who is giving permission?	
	Play	Control/Freedom	What is the balanced between structured activity and trial and error?	

Note. Structure of coding scheme from Patton (2015), and content definitions from Hobbs & Moore (2013).

Data Analysis

I applied a narrative analysis (Merriam, 2001) to understand, recall, and summarize the story of each teacher. Once the data from the interviews, observations, and surveys were gathered on the participant's chart (Patton, 2015), I started to interpret the process that the teachers underwent during the digital literacy initiative. As a documentarian, I researched the subject's background, conducted interviews, and followed her or him for a period of time. Once all my footage was gathered, I worked on the editing to assemble all the footage into one narrative. Similarly, I took

the different data from each participant and organized the story in a chronological narrative with its sociological context.

Like a dramatic narrative, I looked at the struggle and challenges that each teacher went through in order to integrate media production successfully in a public elementary school. The structure of the narrative was built according to the process where the teacher became self-determined (Deci & Ryan, 1985) as it chronologically unfolded through the hierarchy of their needs (Bailey & Pownell, 1998; Maslow, 1970). The first stage was relatedness; the teacher defined their motivation and context as a starting point. Once their motivation was defined, I looked at their sense of shared goals and collaboration in the school. The second stage was mastery; I analyzed the process of integrating media production in their classes with all the trepidations and challenges. In order to make sense of the practice in the classroom, I used the process of the AACRA model to explain how the practice was taking place in the classroom. The third stage was autonomy; I looked at the evolving practice of the teacher to give more control to the students after being reassured by others to explore the use of play pedagogy with media production. Fourth, I summarized the teachers' journeys of integrating media production to become self-determined mentors.

Trustworthiness, Credibility, and Transferability

Since my research design applies qualitative methods, it is open to validity threats and research subjectivity. My research data cannot be generalized since my small sample is not representative of any population. Furthermore, my position must be controlled since I have a history and relationship with each participant; I provided

professional development at the school for a year prior to the research. To address threats to the research validity, I used Lincoln and Guba's (1985) concepts of trustworthiness, transferability, and credibility. I chose the naturalistic approach to the research method because my multiple case study was within a one-school context, which I was part of, and could not be addressed using either experimental approach (Campbell & Stanley, 1963) nor critical strategies (Roman & Apple, 1990).

The strength of the naturalistic approach for the quantitative research method is in its exploration of events and situations from the participants' points of view (Fraenkel et al., 2012). This inductive method allows the researcher to take particular cases or events and describe meaning and interpretation out of the complexity of a situation (Creswell, 2014). Though the studied phenomena cannot be generalized, Lincoln and Guba (1985) offered different techniques to ensure validity, or in their words, the trustworthiness of the data. There are many strategies to ensure trustworthiness. In my research, I used four strategies to ensure trustworthiness: triangulation, member-checking, prolonged engagement, and indexing.

Credibility (Lincoln & Guba, 1985) or authenticity (Maxwell, 1992) includes qualitative strategies such as triangulation, member checking, and prolonged engagement to address issues of internal validity or research positionality. Because qualitative research is based on interpersonal relationships as an interviewer, observer, or analyzer of documents, there is often a chance that the researcher's position influences, in one way or another, the collection and analysis of the data.

Triangulation. The first strategy used in this research was triangulation (Creswell, 2014; Fraenkel et al., 2012; Patton, 2015). In order to make sure the data

collected reflected an accurate description of the teachers' motivations, practices, and support, I applied Denzin's (1989) resource triangulation. Lincoln and Guba (1985) explained how triangulation helps address a distortion of one source by correcting it with another source that has the same information. They distinguished between multiple sources of the same type and multiple sources of different types for the same information. They claimed that the latter has better contextual validation. This is why for my research, I triangulated five different research tools: interview transcriptions, observation analysis, survey results, Twitter feeds, and students' artifacts. All five resources addressed the participants' motivations, practice, and support. Moreover, by collecting and analyzing the data from these five sources, I was able to address each source's weaknesses (Singleton & Straits, 2010).

Patton (2015) explained that these processes, which he called compatibility, bring trustworthiness to qualitative data analysis. The foundational data was the transcriptions from the interviews (individuals and focus groups) as it addressed all the issues as well as reflected on the other data collected. While participants can manipulate a self-reported survey, share wishful thinking instead of facts, and post self-perception statements on Twitter, the videotaped observations and students' artifacts reveal the participants' actual practice. Similarly, the videotaped observations cannot describe the participant's thoughts, but the interview, tweets, and survey gave an idea of the participants' thinking process.

The four interviews with each participant provided a wide range of data. In order to triangulate the transcription, I used the Elan software to color-code the theme and topic of the interview. After putting all information from Elan in a Word

document with color coding and the transcription, I looked at the observation coding to find similarities or conflicts. For example, all teachers complained about devices malfunctioning, but only in Rachel case was it a challenge, as she struggled with the iPad for fifteen minutes. In another case, Sarah was explaining how she is afraid of technology, but during the observations, she was troubleshooting and modeling how to use computers to create a multimedia poster. Once I triangulated the data from the interviews and observations, I added the results of the digital learning profile into the self-determination chart. I retrieved the transcription of the teachers' explanations of their motivations to triangulate it with the observation data.

Last, in order to ensure the credibility of the analysis of the finding, I looked at the teachers' Tweeter feed and the students' artifacts. The Twitter feeds showed me activities that were done prior to my observations, such as Rachel's class Skype talk with a CEO of a recycling company or Isabella and Sophia's student analysis of the book for the Book Trailers. The students' artifacts allowed me to see the depth of the learning process. For example, Sarah's students created a multimedia poster. Being able to look at all the different elements enabled me to see how the final results, which showcased a meaningful synthesis of the students' research, were connected to Sarah's motivation to teach her students how to conduct a study in history.

Member-Check. Member checking was done twice during the research and was a useful technique to validate the findings. After finishing the transcription and preliminary analysis of the findings, I shared my self-determination chart with each participant during the last interview. Each participant had time to go over the preliminary analysis and provide feedback. I explained my interpretation of their

place on the self-determination pyramid and received their feedback if they agreed or had suggestions for modifications. Merriam (2001) explained that having the participants reflect on the analysis enabled them to validate the researcher's interpretations. In the case of Rachel and Charlotte, it helped emphasize that Rachel first used online research as a resource and only then went to the community of practice and received job-embedded professional development from Charlotte as a coach. This clarification was important as it portrayed more accurately the process of relatedness and community as well as the limitations of the in school professional development for someone as advanced as Rachel.

In order to have additional validation for the final analysis, I shared the first draft of the findings chapters with each participant. I sent each one of the four teachers the relevant chapter describing their motivations, practice, and analysis. In the email to each one, I explain that I was looking to represent them accurately and respectfully and would appreciate if they could provide feedback. This technique of validation was highly useful to make sure the description was accurate. Sarah's reflection on the chapter helped me understand her use of her history research in previous years without technology. Her reflection was crucial to understanding her practice on a continuum and not as a whole new practice of media production. Sarah had developed the activity over the years and had adjusted it to use media production as a way to enhance her students' literacy skills.

Prolonged engagement. I joined the support team at Ocean Elementary in the Spring of 2014 for a series of four lectures, and then I came to the school around three days a week, from September 2014 till the end of the data collection on June 22,

2015. This prolonged engagement allowed me to understand the context of the power relations within and outside of the school, the different dynamics of the participants with their peers, the school culture, and the process of integrating media production by many teachers in the school who were influenced by the digital literacy initiative and the participants involvement in it.

Creswell (2014) lists triangulation, member-checking, and prolonged engagement among the techniques used to increase internal validity, or in Lincoln and Guba's (1985) term: credibility. For Creswell, triangulation between sources allows the researcher to claim that the themes gathered are valid. Using member-checking increases accuracy of the information. Prolonged engagement enables the researcher to capture the culture of the setting and observe details that increase the data credibility. Regarding the quantitative concept of external validity, or generalizability, Fraenkel et al. (2012) suggested using the terms *transferability* or *theoretical generalizability*.

Transferability means that instead of generalizing all the findings to the greater population, rich and particular data can be transferred to other contexts that would be interested in extrapolating parts from the findings for their own future applications (Patton, 2015). Maxwell (1992) explained that there is an advocacy element (which is not generalizable) in some cases that are extreme and atypical. Case studies can be used to inspire for innovative practices. In the same way, the mundane use of media production in the 4th and 2nd grades with ordinary teachers can inspire other educators and professional development initiatives to implement media production in their daily instructional strategies. Because little research is available on

digital literacy practices or the use of professional development programs in media production for elementary grades, this study may have value to scholars and practitioners with an interest in advancing the use of media and technology in education.

The particular characteristic of Ocean Elementary School as a Northeastern, suburban, middle-class, high-tech, public elementary school with active support for media production from the school administration, support team, and university partnership limits generalizability. There is a distinctive combination of individuals that promoted the digital literacy initiative: the superintendent, who's enthusiasm about the project could be seen in her tweets; the supportive principal, who used video production to send parents weekly newsletters; the literacy coach, with fifteen years of experience in adult education; and the library media specialist, a professional media producer. In addition, the university partnership with the URI Media Education Lab brings together Dr. Hobbs' 30 years of experience and my 18 years experience. Lastly, the school culture embraced technology, such as Promethean boards, iPads, Chrome Books, etc.

Index. Providing an index of media production practice for each case study allows other settings to borrow elements from the index that are applicable for their unique characteristics. Ryan and Bernard (2000) suggested several analyses of either words or codes using flowing text, such as interviews and observations. I used the AACRA model (Hobbs, 2011) as a particular index of media production practice for each case study. The index allows breaking down the practice into small sections, and it can be modified for other settings. In addition, I created an index for each case

study that briefly describes what kinds of activities and subject matter each case used. Finally, for each case study, I provided an index of their process to integrate media production. The description of each particular component in the process of integrating media production will allow the transfer of certain elements into other professional development initiatives.

As Merriam (2001) explained, “the general lies in the particular; that is, what we learn in a particular situation we can transfer or generalize to similar situations subsequently encountered” (p. 210). In addition, Fraenkel et al. (2012) cited Eisner (1991), who pointed out that not only can ideas be generalized but skills as well. In this research, I collected data from different educators with different sets of motivations, practices, and support. I applied Lincoln and Guba’s (1985) practice of trustworthiness by triangulating the data from five different sources, allowing the members of the study to check the preliminary findings, contextualizing the data due to my prolonged engagement, and put the findings into an index to allow other settings to borrow and modify the findings.

Chapter Summary

The purpose of my dissertation research is to explore why teachers may incorporate media production in their classrooms, how they do it, and what kind of support they need to practice media production. A qualitative method for a multiple case study design was chosen to answer three research questions about the teachers’ motivation, practice, and support needed to integrate media production in an elementary school. I chose to use a multiple case study as my design to advocate for integrating media production from different points of view in one educational setting.

Ocean Elementary is a unique setting, where two years of initiative in digital literacy started with support team encouragement. Like every study, my design has its own limitations, especially due to my position as a researcher and the context of the research. Nevertheless, in order to achieve a policy change in media-production integration in elementary schools, only a multiple case study of one contextualized setting can start to map what is ideally possible and how different settings can apply parts that are relevant to them.

The data was collected between January 23, 2015, and the end of the school year on June 22nd. Five research tools were used: videotaped interviews, videotaped observations, surveys, Twitter feeds, and students' artifacts. The data was analyzed during and after the data collection using narrative analysis in order to organize and evaluate the process of media-production integration for each case study.

By applying Lincoln and Guba's (1985) trustworthiness, credibility and transferability, I addressed matters of generalizability and controls for some of the researcher subjectivities. I used four strategies to ensure credibility: triangulation, member-checking, prolonged engagement, and index. The uniqueness of Ocean Elementary School educators practicing media production in their classes cannot be generalized but can be advocated and transferred.

Chapter 4

Diving into Media Production

The unusual PD day on March 6th was surprising and exciting at the same time. It was a cold Friday, and Ocean Elementary had no students. The 45 full-time faculty assembled in the library to hear the principal. But unlike previous years, after her short introduction and explanation of the afternoon workshops on the new partnership for assessment of readiness for college and careers (PARCC) testing for the Common Core State Standards (CCSS), Sarah, the 4th grade leading teacher and a Catalyst Teacher, came to the center of the room and explained what was going to happen next. She introduced the concept of the Un-Conference and invited the faculty to attend the various sessions.

Sarah shared the idea of using an Un-Conference model, as suggested by the Catalyst Teachers group. An Un-Conference means that people offer to teach their knowledge and skills and also share what they would like to learn. The Catalyst Teachers divided into seven groups and offered various sessions to the full-time faculty. Figure 4.1 shows the promotional materials for the March 6 PD day at Ocean Elementary. All the Catalyst Teachers presented a tool, and as can be seen, all the research participants offered workshops on their use of media production to other teachers. Sarah offered to share how she used Animoto to have students work on book reports. Isabella and Sophia shared their use of their YouTube channel to have students engage and work with media production with the curriculum in science. Rachel shared how her 2nd-grade students could search the web for information using Wonderpolis and create an online answers board with Padlet. Abbie, the behavior

specialist, and George, the media library specialist, shared their Positive Behavior Interventions and Services (PBIS) project to enhance 4th graders' positive behavior via video production. The math interventionist shared her use of Twitter, and one 2nd-grade teacher shared her use of Skype; another 2nd grade teacher shared her use of Thinklink.

Figure 4.1. Promotional board announces topics for the Un-Conference PD Day at Ocean Elementary March 6th, 2015

The faculty was engaged and had many questions to ask the presenters. Most of the questions were about implementing media-production practice in the curriculum and about the benefits for students. Sarah showed and had the participants try to use Animoto with iPads. Isabella and Sophia showed their YouTube channel and had costumes of their characters to play with the participants in the same way they would do it in their class. Rachel had the participants go online, look for

information, and share it on the Padlet board. Abbie and George had the participants sit at the editing suite in the library and watch the video while they explained what they did. Figure 4.2 shows the different sessions that each participant offered during the March 6th PD day. By the end of the day, the Un-Conference activity received high praise for engagement and skill building. During the following months, I had several faculty members mention that it was useful to see Sarah, Isabella, Sophia, and Rachel in order to think how they could implement media production activities in other classrooms.

Sarah Presenting Animoto

Isabella & Sophia presenting Prezi

Rachel presenting Padlet

Abbie & George presenting Video Production

Figure 4.2. Research Participants on March 6th, 2015 at the UnConference PD day

This chapter will describe the work of Sarah in the spring semester of 2015. But first, I will give an overview of the data chapters introducing the work of Sarah (Chapter 4), Isabella and Sophia (Chapter 5), and Rachel (Chapter 6), as they are

supported by George, the library media specialists; Charlotte, the literacy coach; Grace, the math coach; and Abbie, the behavior specialist.

Overview of Data Chapters

In the next three chapters, I offer a narrative for each case study describing the journey of the teachers and the support they received from their in-school community, the out-of-school online community, and university partnership to implement media production in their classes. All four participated in the Catalyst Teacher group, a professional development in digital literacy with Dr. Hobbs and myself. All four volunteered to be interviewed four times, to be observed five times, and to take the digital learning profile survey. The data consisted of videotaped materials (interviews and observations), students' artifacts, participants' tweets, and survey results. In order to analyze the data, I organized each case study into three sections in an effort to answer the three research questions:

1. Regarding the sense of shared purpose (relatedness): Why do some elementary school teachers practice media production with their students?
2. Regarding the sense of competence (mastery): How do these teachers differ in their media production practices in their classes?
3. Regarding the sense of reassurance to explore (autonomy): What is needed to promote the variety of media production practices in elementary education?

As I described in Chapter 3, I use this set of data to analyze the media-production practice of the four teachers. The decision to narrow down the data to focus solely on their motivations, practice, and support, was to ensure a reasonable scope of the study (Stake, 1995; Yin, 2009). First the observations were analyzed

using Elan video analysis software to code the five digital and media competencies of the access, analyze, create, reflect, and act (AACRA) model. Second, each interview was coded using the three components of self-determination theory. Third, once all the data was coded, I synthesized the information into the self-determined teacher model for each participant. Fourth, in the last interview, I shared the preliminary model and received feedback from the participants in order to member-check (Creswell, 2014; Fraenkel et al., 2012; Merriam, 2001; Seidman, 2006). Fifth, taking the analyzed data, I created an index of media production practices for each case study (Ryan & Bernard, 2000; Yin, 2009) as well as a narrative description of the teachers' relatedness, mastery, and autonomy (Goldman-Segall, 1998; Patton, 2015).

Each one of the findings chapters is divided into five sections: introduction, relatedness, mastery, autonomy, and summary. First, a portrait of each case study is introduced to give the context of the study. Second, in order to tell the story of each one of the case studies coherently, I chose to start with the teachers' motivations and their relatedness to their support team. Third, I described their process of mastering media production as they gained confidence. Fourth, I explained how their struggle to explore and be assured that they could play with media production in class enhanced their sense of autonomy. Fifth, I summarized the findings as they form the participants' self-determined model.

Ocean Elementary used the model of job-embedded professional development where a group of support team members and the community of practice supported instruction related to the CCSS. The digital and media literacy initiative at the school started when the library media specialist, George, and the literacy coach, Charlotte,

started a book club and got the 4th-grade teachers interested in the practice of media production. Their semester-long discussion initiated a series of workshops and practices that convinced the principal to have a whole-school initiative that later, with the superintendent's blessing, became a district-wide initiative. In the spring of 2015, the teachers were invited four times to the DigiPlayground. In these early, before-school sessions, teachers shared and discussed how to implement media production in their classrooms for forty-five minutes. In addition, the teachers used #OceanDigi [a pseudonym] on Twitter to communicate outside of school and share resources. In the school, there were different communities of practice: the digital and media literacy group, the special education team, and each grade level had a weekly common planning time.

The three case studies feature three diverse examples of teachers who practice media production in their classroom while receiving support from the support team. Each case study showcases a different journey toward becoming a digital literacy mentor.

Introducing Sarah, A Grade 4 Teacher

I first met Sarah when I gave a workshop about the different uses of media literacy in elementary class. I screened three different scenes and asked the group, who had read Dr. Hobbs' book, to analyze them using Hobbs' five critical questions (Hobbs & Moore, 2013, p. 121). After a second of silence, Sarah was the first to offer her thoughts. While her answer was deep and insightful, she finished her answer stating that it was only her opinion and she was not sure since she was not an expert. Sarah's leadership role in the school was important to many teachers, who felt

unsecure about using technology. She served as a model teacher who did not see herself as tech savvy and yet tried to use it for the benefit of her students.

Sarah's B.A. in psychology and experiences first as a teacher's assistant and then as a classroom teacher shaped her pedagogy. She was one of the first four teachers to have a Promethean board in her classroom. Sarah did not take credit for being a pioneering teacher using technology. Instead, she claimed that she had just won the lottery with three other teachers who had volunteered. However, I wanted to acknowledge her tenacity and curiosity to be an innovative teacher to use the Promethean board by volunteering to be part of the lottery and to accept her reward. This chapter showcases how Sarah went through a deep process in the two years after the digital literacy initiative started. Her willingness to continue and explore media production even though there were technical issues, her initial protectionist approach, and her acceptance of the messiness of integrating media production in her class can help experienced teachers see how to overcome fears and frustrations toward implementing media production for the benefit of their students.

Sarah liked to collaborate with her friend of 26 years, Barbara, the kindergarten teacher, and George, the media library specialist who shared similar ideas about the limitations of standardized tests, school reform, and students' voice. She saw the value of CCSS, and she used the help of the math and literacy coaches to align her instruction to the CCSS. Sarah taught all subject matters to her 4th grade students. While math is a stricter curriculum, in science, English Language Arts, (ELA) and social sciences, she had more options to decide on her pedagogy. As part of her role as a lead teacher in 4th grade, she led different sessions of professional

development, like the one at the March 6th PD day and during DigiPlayground. Figure 4.3 shows one out of four special DigiPlayground morning sessions offered during the Fall and Spring of 2015 which introduced how to incorporate media production into teaching for her fellow teachers. In the image, there are different working groups learning different tools of going through a one-on-one tutorial on a specific tool.

Figure 4.3. A Morning DigiPlayground Session in the Support Team Room.

December 10th, 2014.

In order to understand Sarah's motivation, practice, and support of implementing media production in her classroom, this chapter describes her sense of relatedness, her sense of mastery, and her sense of autonomy. First, I portray her motivation and collaborative work in the Ocean Elementary community of practice. Second, I analyze her practice using Glogster to enhance her students' learning. Third, I describe the process Sarah made to step out of her comfort zone and start to explore how media production can be useful for her teaching. Sarah's journey in the last two years of the digital and media literacy initiative made a significant shift from being teacher-centered to learner-centered using media production to become a digital literacy mentor.

Relatedness: How Collegiality Advances Shared Goals

Relatedness is activated through a sense of shared goals. It encompasses the individual's motivation along with the colleagues' collaboration to achieve the same objectives. First the individual must articulate to herself or himself what are her or his educational goals and then discuss with others. This discussion and negotiation develops the agreed-upon mission of the community of practice. Sarah's shift toward using media production for a learner-centered approach happened as she took part in the book club and was influenced by the discussion of the group's shared goals. Her relationship with others combined with her natural curiosity helped her address her anxiety about technical failure. It was the community of practice at Ocean Elementary and her close friends that showed Sarah how her learner-centered pedagogy could be achieved with media production and at the same time be connected to educational standards.

Though Sarah did not see herself as one of the school's innovative teachers, Table 4.1 represents Sarah's self reflection on her use of digital technology in comparison to the rest of the school faculty. She was just above average in every section. She started to value the use of digital devices after George, the library media specialist, came back from the state university summer institute and together with Charlotte, the literacy coach, advocated to use digital literacy to enhance the students' learning. In 2014, Sarah started to use Facebook, Twitter, and Pinterest. Her personal connections with teachers in school, such as the enrichment teacher, the library media specialist, and the kindergarten teacher helped her to explore different ways to incorporate media production in her class. Her students also contributed to her

exploration as they had more responsibilities and shared ideas for instructional strategies and technical troubleshooting. To better understand the context of each of the case study participants, Table 4.1 represents the relationship between Sarah's personal score on her perception of media use in class and the average score of the full-time faculty. The table gives us an overview of Sarah's practice at Ocean Elementary.

Compared to her colleagues, Sarah was above average in using media production but below average in showing videos and using video recording. She used her Promethean board more than average and was a little bit below average in her use of the Internet during class time. In order to interpret this table and understand why media production involves less video recording and why the Promethean board was not used to showcase many videos, we need to analyze Sarah's motivation to use media.

Table 4.1.

Sarah's Self-Reported Frequency of Using Technology on a Five-Point Likert Scale

	How often are you using media production in your classroom?	How often are you using the Promethean board in your class?	How often do you use Internet during your classes?	How often are you showing videos in your class?	How often are you using video recording during your class?
Sarah	3	5	3	2	1
School	1.9	4.125	3.69696969	2.71875	1.212121212

Note. Survey taken by 34 faculty members on January 7th, 2015. Sarah took the survey on March 8th, 2015.

Motivation: A Growing Sense of Responsibility

Over the course of the year, Sarah shifted her motivations from a learner-centered focus to more emphasis on academic content and quality. As she grew more comfortable with using media in her classroom, Sarah was able to look at the ways that she could connect her use of media production with the CCSS. She became appreciative of the digital content that her students produced and that led her to empower more and more of her students. Sarah shared with me during the observations how she liked the level of sophistication of the students' artifacts and that this year she gave her students more freedom to choose how to incorporate media in their online posters. Still, she did not see digital media production as being deeply tied to her professional identity. During the interviews, Sarah made sure to state that she was not a tech savvy person and that her involvement with media production had started only after hearing George and Charlotte talking about the value of digital and media literacy. Charlotte's support of the digital initiative helped Sarah to use media production to reach the CCSS in literacy and social science for her students.

When Sarah first encountered the concept of digital literacy, she recognized that it was an important part of students' lived experience and began to feel a sense of personal responsibility. At the same time, she had some protectionist concerns: she worried that children were too immersed with screen time and not given enough exposure to books. She perceived video games as a negative practice for children. She said students need to realize their digital footprint, how social media works, and what their responsibility is. Once she acknowledged that as an educator she ought to teach digital citizenship, her negative views of media changed. She explained:

That's the protective part of me, because I am kind of a Demystifier, that was a strong characteristic in the beginning. I'm not quite so worried about that now. Now it is more seeing what they can do with the technology and how creative they can be with it. (Sarah, first individual interview, 03.09.2015)

In the beginning of the 2014-2015 academic year, Sarah's digital learning profile was a Demystifier, Watchdog, and Spirit Guide. Her protect score was 76 and her empower score was 77. By March that academic year, Sarah received the highest score as a Demystifier. However, Professor and Taste-Maker received a higher score than Watchdog and Spirit Guide. In addition, as can be seen in Figure 4.4, her protect score was reduced to 67 and her empower score was also reduced evenly to 67. This suggests that her attitudes moderated and became less intense over time. As explained earlier, the score represents the strength of response to the empower and protect items on the survey. The relationship between the empower score and the protect score is of most interest here. In Sarah's survey results, there was a balance between her empower and protect attitudes.

Figure 4.4. Sarah's Digital Learning Profile Taken on October 1st, 2014 and March 8th, 2015

Interestingly enough, Sarah started the year after coming back from the Summer Institute in Digital Literacy excited to use technology, and she focused on the learner (Spirit Guide) and understanding media systems (Demystifier and Watchdog). Six months later, she still valued asking critical questions about media systems (Demystifier had the highest score and Watchdog came fourth), but she also valued the content and quality of media messages as tools for learning (Tastemaker and Professor). Her score on learner-centered items (Spirit Guide and Motivator) increased. As the leading 4th-grade teacher, when a new math curriculum was implemented around March and there were discussions about new curriculum resources in literacy and science and also starting a Google Chrome initiative, it is not surprising that Sarah was thinking about how to merge digital media with content and quality. Sarah explained her Demystifier motivation, “My ideal world would be to be able to teach the standards and curriculum in a way that also engages the students in their learning” (Sarah, second individual interview, 05.21.2015).

Sarah’s motivation to teach digital and media literacy was a combination of feeling responsible to foster students as critical thinkers who use digital devices wisely to problem solve. Furthermore, Sarah was motivated to use media production to find new ways to engage them in the fun and curiosity of being a learner. As I synthesized Sarah and other participants’ interviews, I appreciated how her motivation changed while she was engaged in discussion with George, the media library specialist, and taking part in the digital literacy book club under the leadership of the literacy coach. The next section describes the process of being part of a

community of practice that advances shared goals and motivation to implement media production.

Shared Goals: Why Sarah's Motivation Changed

Sarah's motivations were influenced by her relationships with her colleagues, who themselves were on a steep learning curve in reflecting on the potential of digital media to enhance learning. In all her interviews, Sarah described how her participation in a community of learners and her personal relationship with the library media specialist contributed to a shift in her thinking and her practice, as she also contributed her experimentation using digital media with her own students. Over the years, Sarah participated in many book clubs at Ocean Elementary School. In the 2013-2014 academic year, the book club read Hobbs and Moore's (2013) book, *Discovering Media Literacy: Teaching Digital Media and Popular Culture in Elementary School*. The discussion generated many ideas for innovative practices using digital media. Looking back at more than two decades in the school, Sarah remembered many different collaborative initiatives in the school to advance digital media. For example, she recalled when the teachers and volunteer community members put in Internet wiring in the mid-1990s as part of the technology coordinator's enterprise to have the school be technologically advanced. Like with the digital literacy book club, Sarah was always part of that discussion. She explained that having colleagues to talk about new ideas with had always been inspiring to her.

I observed many instances where Sarah engaged in sharing and learning from colleagues she already had strong relationships with such as the DigiPlayground and the Catalyst Teachers' sessions with Dr. Hobbs. She had different partners who she

felt comfortable sharing practices with: George, the library media specialist, her long time friend, the kindergarten teacher, the enrichment teacher, and her 4th-grade peer teachers.

Sarah was at the same time a learner and a leader in her community of practice, such as the book club, the Catalyst Teachers, and her partnership with colleagues like George and the kindergarten teacher. She highly appreciated the chance to see how others were using media production in addition to being supported when needed in her class. She felt reassured that someone like George was in the library and that she could come to ask for pedagogical and technical help from him. In a focus-group conversation, Sarah stated that she felt more comfortable and protected while being acknowledge by her colleagues. She explained:

It's like you are not afraid of getting caught in something when you can easily call on someone (pointing at Grace and Charlotte) to help you with the glitches or with trying to figure out the things you've done three times but then forget how to do. (Sarah, focus group, 05.26.2015)

Ocean Elementary faculty used the term *enhanced learning* very often. It all started when Dr. Hobbs introduced the SAMR model (Puentedura, 2010) to the leadership team in order to advocate using digital technology when it added educational value to traditional teaching. In general, as seen in Figure 4.5, the SAMR model has four stages of technology integration.

The two lowest ones, substitution and augmentation, mean that digital media is used mainly as a technical tool to enhance the practice but not the learning. For example, substitution means that the teacher used the Promethean board to replace the

white board; there was no use of additional functions of digital technology.

Augmentation means that digital media was used to expand one or more dimensions of the print version, such as the use of computers to search for information only on one website such as Wikipedia instead of looking at a print encyclopedia. The two other upper levels are processes of deeper integration of digital technology that transform the use into additional dimensions of learning. Modification means that digital media is used to add new educational value to the print assignment. For example, the use of a camera to document a science experiment adds audio and visual dimensions to a written assignment. The highest level is redefinition, meaning the assignment is being changed to add the benefits of digital media to the traditional print assignment. For example, applications such as Explain Everything on an iPad allowed the students to record pictures, upload video, write titles, and record their voice to create a product. The final product not only has audiovisual dimensions, but the process itself redefined the educational process to be able to locate reliable information, analyze by creating categories, synthesize through aggregation, create a message that encompass the findings, and reflect on the product and its effectiveness in communicating the findings to an authentic audience. This is why when Dr. Hobbs introduced the SAMR model to the Ocean Elementary leadership team, she emphasized how using media production enhances the students' learning (modifications and redefinitions) and not just the teachers' practice (substitution and augmentations).

Figure 4.5. The SAMR model (Puentedura, 2010).

After learning about it in that session, the literacy coach, Charlotte, used to reference the SAMR model as part of her job-embedded professional development in order to have the teacher think about the educational goals of using media production. Being influenced by Dr. Hobbs and Charlotte, Sarah indicated many times that she was motivated to use media production if it enhanced learning. When I asked what enhancing learning meant to her, she replied, “If enhancing learning means that you are getting children to love to learn, to want to do things, to try projects, and take risks...and they are not doing, you know, boring worksheets” then that would be beneficial (Sarah, third interview with George, 06.17.2015). Sarah was aware that digital media could be used to simply put traditional paper-and-pencil instructional practices on a computer, and she recognized that these practices did not necessarily enhance learning.

As a member of Ocean Elementary community of practice, Sarah led sessions and discussion. As the lead teacher for 4th grade, she offered her experience and encouraged the other teachers to share their experiences and knowledge of using media production for the 4th-grade curriculum. As mentioned before, Sarah offered a

session to showcase her use of Animoto during the school PD day on March 6th.

During the DigiPlayground sessions, which offered a 45-minute hands-on workshop for teachers before school during December and January, Sarah showcased her work with her 4th-grade students. For example, she showed how her students used Animoto, a video editing application on the iPad that allowed students to upload pictures and add titles as part of a poetry assignment.

Sarah's community of practice included her students as well. She explained, "I don't have to figure everything out on my own. I am also depending on the students more. There are a couple of the students who are really good with the technology and they happily help each other" (Sarah, second individual interview, 05.21.2015). I observed several instances when Sarah's students would come to her and show her proudly a new feature they discovered. In many cases when there was a technical difficulty or when one student wanted to do something that Sarah did not know how to do, she would go to one of the students and ask for help. For example, as seen in Figure 4.6, one student showed another student how to type a citation at the bottom of their multimedia poster. Sarah's sense of confidence to approach a student and ask for help allowed a reciprocal atmosphere in her class where learning happened together. Her appreciation of her students' knowledge along with her guidance toward the educational goals showcased her motivation to balance, protect, and empower.

Figure 4.6. Sarah Watches How One Student Helps a Peer. March 2nd, 2015.

Although Sarah did not often use Twitter to describe her identity in a community of practice, figure 4.7 shows how, she did retweet and acknowledge a colleague who stating her feeling about relatedness and practice.

Figure 4.7. Sarah's Tweet About Community of Practice. April 8th, 2015.

Faculty Collaboration in Media Production Increases Confidence

Sarah was able to explore media production as a learning tool because of her collaboration with the library media specialist and the kindergarten teacher. As she explained, even when these projects had some glitches, these collaborations increased her confidence that media production could benefit students' learning.

Sarah and George worked together to have students create videotaped book reports. Students read and analyzed a book, wrote a script, and then George worked with students on videotaping and editing. Having George, the media library specialist, to guide Sarah's students in the production process liberated her from having to know the technicalities of producing a video. Sarah would brainstorm an idea with George, and together they would guide the students. In an interview, Sarah said:

The students are planning their project in the classroom; they are doing the research and the writing, and then they are going to the library and filming, and he (George) taught them how to do it. So they are editing and filming on their own. I am not playing a big role in that, and if he was not here I would probably not be doing that. (Sarah, first individual interview, 03.09.2015)

While George's professional knowledge allowed Sarah to get support for her students' video production, the presence and support of other teachers also promoted her exploration of more simple media production activities. Sarah's class occasionally collaborated with younger students in kindergarten. In one class, Grade-4 students worked with kindergarten students to create a short video on how seasons change using iPads and a simple video production app. Having the kindergarten teacher come

with her class to work collaboratively on a Shadow Puppet video about the changing seasons or the enrichment teacher teach about crystals using stop-motion animation gave Sarah opportunities to explore media production as part of a collaborative effort. This is an important part of the community of practice that allows the individual to benefit from the common knowledge and share their own.

Sarah demonstrated reflective thinking about the relative value of media production as a tool for learning. In my interviews with her, she sometimes questioned the effectiveness of her classroom use of media production. One of her specific concerns had to do with the actual audience for the videos students created. For example, the activity involved four students who produced a video to teach 2nd graders about place value using a count of Cheerios. Two of these students went on and produced another video with the math interventionist, but in general, Sarah was questioning the educational value of the four producers as well as the benefit for the 2nd graders. While she believed the four students who created the video advanced their conceptual thinking of place value, she acknowledged that other students who did not participate did not benefit. Although the video was created in order to present it to younger students, she was not confident that the video was seen by lower grades.

Communities of practice in the workplace have their own limitation, as they rely on social interaction to advance the practice, but Sarah also used social networks (Twitter, Pinterest, YouTube) to find examples and become competent in media production. Sarah's relatedness to in-school, in-class, and out-of-school support reinforced her motivation to use media production, as she saw that she could share her educational goals with many other educators.

Sarah's motivation to use media production changed from 2013 to 2015 thanks to her meaningful relationships with her colleagues. Her motivation shifted from being a protectionist to being learner-centered and to value the use of digital content for CCSS. The library media specialist, George, was able to give support and brainstorm ideas of using media production as student-centered pedagogy. Her friends for 26 years, the kindergarten teacher and the enrichment teacher, collaborated on a media production project. Sarah's students became part of the community of practice when they promoted each other and even Sarah's use of media production in class. The participation in the book club and the Catalyst Teachers group was a place to have a discussion about the teachers' shared goals. Sarah had a long and meaningful experience of relatedness by being part of the community of practice in digital literacy at Ocean Elementary. Having shared goals promoted her sense of mastery using media production with her students during class time.

Mastery: How to Connect New and Traditional Practices

Mastery is a sense of competence. It includes the actual practice as well as the understanding that it is always a work in progress to become even more competent. To master a practice, one has to acknowledge that they will never become the ultimate competent person since there is always room for improvement but at the same time not be discouraged by its trepidation and challenges. Sarah's practice of media production varied from blogging, video recording, and designing a multimedia poster for a history research project. Her structured approach using rubrics and stages for media production to integrating the curriculum enabled her students to experience all digital and media competencies. While she had her fears about using media

production, her tenacity promoted her sense of competence to explore the benefits of media production during class for her students and herself as teacher.

Sarah created many opportunities for her students to produce media in her 4th-grade classroom. During my observation, Sarah's class used media production in various ways. Table 4.2. shows a complete list of the media production projects she developed during the 2014–2015 academic year. Her students produced short videos as a form of a book report they called Book Hooks to have other students become interested in reading the books featured in the short videos. Students reflected on their reading by posting blogs and their Book Hooks on Edublogs. A group of students produced a video about place value (a mathematical concept) to teach younger students (2nd graders) about it. During recess, Sarah's students would come to the library to create instructional videos using the media literacy skills they had learned. As part of the Positive Behavioral Interventions and Supports (PBIS) initiative in school, Sarah's class hosted Barbara's kindergarten class, and children worked together to create short videos on seasonal changing using Shadow Puppets. The enrichment teacher together with Sarah had a special class exploring how stop-motion animation can help create animated videos about crystals. From Sarah's point of view, her biggest accomplishment was a history research project about an inspirational historical figure using Glogster, a webpage customized to have written text, links, embedded pictures, and videos.

Table 4.2.

Sarah's Various Uses of Media Production in Class

Project name	Subject	Format	Tool	Duration
Book Hooks January-May, 2015	English language arts	Video	Cameras Computers	4 classes
Room 410 blog September-May, 2015	English language arts	Webpage	EduBlog	Out of class
Place Value October, 2015	Math	Video	Cameras Computers	3 classes
Instructional Video January-May, 2015	Recess	Video	Cameras Computers	3 recess
Seasons' change Kindergarten May, 2015	PBIS	Video	Shadow Puppet	1 class
City Animation April, 2015	Enrichment	Animation	Stop Motion Studio	1 class
Historical figures April-May, 2015	Social Science	Multimedia	Glogster	3 classes

Glogster as Multimedia Production

Glogster is an online platform that allows students to create their own designed webpage to include text, links, pictures, audio, and video. According to the website, “Glogster is a cloud-based (SaaS) platform for presentation and interactive

learning. It allows users to mix all kinds of media on a virtual canvas to create multimedia posters” (Glogster, 2015). It was developed in the Czech Republic in 2007, and currently it has headquarters in both Prague and Oxford, MA. In 2014, they offered an app version for iPad and in 2015 an app version for Android. On their website, they advertise that there are more than 1.9 million teacher accounts and over 17 million student accounts. Their online library offers more than 3,000 examples that were curated from the 45 million Glogs created in the last eight years. In an interview, Sarah said:

The Glogster project was a beautiful blending of both the traditional—students researched and wrote their reports and then used the Glogster platform to enhance their reports by adding images, graphics, and videos. They learned more as they did that. They had to listen to videos about their person and they wouldn't have done that doing regular research. I think they got a richer understanding of the people they were researching. (Sarah, second individual interview, 05.21.2015)

Sarah’s practice of media production using Glogster had all the five digital and media literacy competencies from the AACRA model. As seen in Table 4.3, Sarah used the Glogster activity to enhance the students’ five competencies. Students learned to access computers and search for reliable information. They analyzed the information and synthesized it into their own Glog. They created the multimedia online poster. They reflected on their work during class and shared their work with friends and family in order to raise awareness about the topic. In addition, the students benefited from the project by being engaged, collaborating, voicing their

opinion, problem-solving, developing their conceptual thinking, and being socially responsible.

Table 4.3.

AACRA Model of Glogster as a Media Production Tool in Sarah's class

Competencies	Practice in Sarah's Classroom
Access	Using computers to search for reliable data and use Glogster
Analyze	Evaluating information and synthesizing it into a coherent narrative
Create	Designing a multimedia poster to tell the impact of a historical figure
Reflect	Peer review the project while filling out evaluation rubric
Act	Showcasing the posters to family and friends to tell the stories

Two years ago, Sarah was looking for a tool to help her students on their history research project. In previous years, she had given a research assignment to explore a historical figure who made a difference in the world. Using Glogster allowed her to expand the assignment to not only use the Internet but to add a creative multimedia component to it. The goal of the assignment was to learn about the famous historical figure's biography as well as her or his impact on their community and humanity. Each student chose individuals from a list of 50 remarkable figures. By the end of this module, students created an online multimedia poster to share the information they learned. While the Glogs are available online for anybody to see, Sarah intended the online posters to be a way to help students learn from each other and broaden their knowledge of historical figures and their impact. In the section below, I offer a close analysis of the instructional practices of this activity, as it exemplified key elements of the AACRA digital and media literacy model.

Access. Students started by reading a short book about their historical figure. They took notes about their historical figure's background and how they had made a difference in the world. Then, students learned to use the laptop computer to effectively browse for information, evaluate its accuracy, and troubleshoot technical problems. Two students would bring the laptop cart from the computer room or from another classroom. Every student would take a numbered computer and sit at their desk and start searching for information. Sarah encouraged her students to go beyond the book library, Wikipedia, and the first results on a Google search by asking them to have videos, audio, and images in addition to the written text. She modeled using the Glogster library and showcased research strategies. The students would need to read, watch, listen, and evaluate the information. Once they decided on the relevancy and the amount of information, they would analyze it.

Analyze. The students looked at the information they found and analyzed it by synthesizing the different texts and audio-visual media together to one coherent narrative. The requirements of the research were to find the personal background, how the historical figure made a difference in the world, favorite quotes, a fun fact, and cite the data source. The process was done online and offline using the links and the various media to put on a Glog draft and use notebooks. Each student individually received some feedback from Sarah and returned to their desk to make the changes and start creating their Glog.

Create. Each one of the twenty students in Sarah's class created a Glog. The historical figures who made a difference in the world included Malala Yousafzai, Amelia Earhart, Martin Luther King Jr., Jackie Robinson, Dr. Seuss, Ben Franklin,

and many more. Figure 4.8 shows an exemplary student's work featured the biography of Ben Franklin. Most of the Glogs had at least one audio recording of the student describing the historical figure, more than three pictures of the person and her/his work, and at least one online video that summarized their impact. The creative process included designing the title for the poster and its background. The most challenging part was organizing the text and the multimedia in a comprehensive way that would show the connections and create a visual narrative. Most of the students divided the text into two paragraphs: one on the personal background and one on the person's impact. The fun facts, quotations, and citations were organized according to the design of the title, pictures, and videos. After saving their composed poster, the students assembled on the classroom's rug and reflected in their creations.

Figure 4.8. Student Work Product: A Ben Franklin Glog.

Reflect. In order to have a structured reflection, Sarah created a rubric (see Figure 4.9) to analyze the Glogs' content and form. Reflecting upon the use of Glogs had three stages: first, students chose a partner and each filled the rubric; second, after receiving the feedback and modifying their Glog, students reflected on their own

work and submitted the rubric to Sarah; third, Sarah wrote an assessment of the final Glog and gave it to the students. In order to model the peer review process, Sarah modeled it with two students using the class Promethean board. After the two examples of the peer review process, the student dyads spread around the room and looked at each others' Glogs while filling in the rubrics. After they finished, they assembled back and reported to the class. The reflection process allowed the students to monitor their work and receive immediate feedback. While the peer review activity helped the students modify their work, it was their anticipation to present to their friends and family that made the project exciting and engaging.

Name_____ Date _____

Title of Glog_____

	Exceeds Standard – 4	Meets Standard - 3	Nearly Meets - 2
Independent Research	<ul style="list-style-type: none"> •very well-developed paragraphs with more than 5 details •interesting lead and conclusion •all spelling and punctuation is correct 	<ul style="list-style-type: none"> •topic sentence is clear •2 Paragraphs with at least 5 details for background and how person made a difference •transition words used •mostly correct spelling and punctuation 	<ul style="list-style-type: none"> •might be missing some elements from 3. •lacks detail •spelling and punctuation make it hard to read.
Appearance	<ul style="list-style-type: none"> •excellent choice of colors and background 	<ul style="list-style-type: none"> •effective use of colors •can read text easily 	<ul style="list-style-type: none"> •colors make it confusing. •Information not easy

		<ul style="list-style-type: none"> • background is good match for person •just right mix of text and images 	to read
Multi-Media	<ul style="list-style-type: none"> •excellent choice of images and/or videos •graphics clearly help clarify the report 	<ul style="list-style-type: none"> •images enhance the report and go along with the topic •videos enhance the information and are a good length •graphics help explain the Glog •presentation is clear 	<ul style="list-style-type: none"> •too many videos or images that do not enhance the report. •videos too long

Comments: Compliments and Suggestions:

Figure 4.9. Evaluation Rubric for Glogs Project.

Act. Sarah arranged a special celebration for the students' creative work to be showcased. The family and friends who attended the Glogfest on May 29th in Sarah's classroom could see how the students were able to connect their historical research and multimedia production to a social-responsibility theme of making a difference in the world. The Glogfest was a celebration of showcasing the students' work and what they learned while going through the different stages. It accomplished Sarah's motivation to connect the curriculum (social science research) and teach about social responsibility. Figure 4.10 shows the blog that Sarah posted a blog on the class EduBlog site with a link to the Glogster gallery so that parents and teachers who could not attend could see the work online. Charlotte, the literacy coach, described the process where Sarah's students "understand how to do research, why to do research, and how to write a certain way... because Sarah uses Glogster, it is so

engaging and motivating. They have a purpose. And they can share it with the wider audience” (Charlotte, focus group, 05.26.2015).

Glogfest

Posted on [May 29, 2015](#)

On Friday, May 29th, our class celebrated the completion of our “People Who Have Made a Difference” Glogs by sharing them with family and friends. Students researched a person of their choice, someone who has made an important difference in the world. They read books, took notes, researched on the internet, and wrote about the person’s background and what they did to make a difference. Then they conferenced with the teacher, inserted their text into their Glog, added a background, images, videos, and graphics to enhance their report. They chose these things with intention, making choices that would improve their story, learning lots of new skills and facts along the way.

Figure 4.10. Sarah Posting about Glogfest on EduBlog May 29th, 2015

Sarah’s perception of her students’ benefits. Sarah’s students went through a meaningful process of digital literacy while producing a multimedia poster with Glogster. Sarah’s students learned to locate the information, evaluate its accuracy and relevance, synthesize it with different multimedia texts, and communicate it to other students, friends, and family members. In addition, they were troubleshooting when the computer was frozen or the browser did not work. They enhanced their conceptual

thinking as they were exposed to diverse ways of describing the historical figure's life and contribution. They collaborated with a peer on the reflection. And most importantly, they were engaged in learning since they had an authentic audience that valued their voice. In an interview, Sarah said:

It really benefits the kids because now they have a real purpose for writing. In the past it was you writing and you are giving it to one person: the teacher. Now, you are making a multimedia presentation that could be shared with billions. (Charlotte, focus group, 05.26.2015)

Teacher's benefits. At the same time, the Glog production activity benefited Sarah as the teacher. Her students were more engaged. As a result, they put more effort in their learning process and their research. These experiences preserved her high status in Ocean Elementary School. Being part of the new initiative and mentoring others in media production for educational use kept Sarah in her leadership position. The principal, literacy coach, and her peers acknowledged Sarah for her work in professional development sessions or the school faculty meeting that I attended. Being acknowledged and able to continue being a leader developed her agency. She was asked to speak in front of the school committee at the Town Hall and present her work during PD day. Pedagogically, the use of Glogster allowed her to provide differentiated instruction and formative assessment in a highly natural way. According to Charlotte, the literacy coach who observed Sarah's work, a tool such as Glogster allows an experienced teacher such as Sarah to offer differentiated instruction, where students can make very basic to sophisticated multimedia posters (Charlotte, focus group, 05.26.2015). In addition to differentiated instruction, online

poster projects like this are also a useful tool for peer review and formative assessment. Sarah used a rubric to evaluate her students' work as she facilitated the activity while walking between the students who worked on their laptops. The students filled out the rubrics together and handed them in to Sarah, who later assessed their Glogs.

It took Sarah less than two years to achieve this level of mastery with using Glogster in the classroom. However, she felt that the other media production projects she developed during the 2014–2015 academic year were not as rich as Glogster since they were less structured. Because this activity was already a well-developed part of her existing curriculum, switching to the use of an online platform to produce a multimedia poster was difficult and yet more natural than the other media production activities in her class.

Sisyphean Process of Mastering Media Production

Mastering a skill or a practice takes time, effort, and perseverance. Especially challenging is the understanding that it is a Sisyphean process where you will never master the skill or the practice (Pink, 2009). Whereas Sarah repeatedly explained during the interviews that she was not the most proficient or technology savvy of teachers, she demonstrated her tenacity to explore new ways to engage her students. Aside from Glogster, Sarah also produced video in her class in previous years using a flip camera and sent the students to the library media specialist during class time or recess to use his more sophisticated equipment.

Sarah wanted to go further and try Shadow Puppets and stop-motion animation because of work created by her colleagues that appealed to her. She

collaborated with her friend and colleague, the kindergarten teacher, for Shadow Puppets and the enrichment teacher for the stop-motion animation. Through a series of trial and error experiments, she evaluated it and decided to keep exploring it the next year. At first Sarah and her colleague experimented with the students. Having to address technical issues and learning the process together allowed them to think about how to use it better next time. Though Sarah experienced constant fear that there were going to be glitches, she knew that she had colleagues to support her practice. “It’s the technical problems that can make it stressful for us, but I’ve learned to use trying to solve those problems as a learning moment. I think they teach resiliency and persistence” (Sarah, second individual interview, 05.21.2015). Whereas Sarah was able to be tenacious and use media production, it did not eliminate her trepidation from using it in her classroom.

Trepidation of Mastering Media Production

Like many other teachers, Sarah experienced fear and anxiety when using media production, even with Glogster. In an interview, she explained her process:

Last year, when I first found Glogster, I was a little afraid to try it because I was not an expert in using it. Then, after I jumped in, I saw how engaged the students were with it. But that was my first experience of really letting go and letting the children explore and learn and teach each other. That went so well, it encouraged me. This year I think we stepped it up a little bit more with them...with my understanding of how those things can enhance their learning and help them have a deeper understanding of the topic they were researching. (Sarah, second individual interview, 05.21.2015)

The ability to cope with your own trepidations and be tenacious enough to explore media production in the class is one of the characteristics of mastering a skill or a practice. Sarah shared with me her in-class challenges, such as technical difficulties, relevance of the content, and educational value.

During one observation of the collaborative work between Sarah and Barbara, the kindergarten teacher, there was a small technical problem that had the potential to derail the lesson. The 4th-grade and kindergarten students used Shadow Puppet on iPads. The application was recording the photos and audio, but for unknown reasons, it did not allow editing once it was saved to the iPad. As students were finishing the projects and adding their recorded voice and titles, they had to face a new challenge in saving their work. The two teachers had wanted to use an online secure gallery called SeeSaw. The final video would have been uploaded to one of the teachers' accounts and then on the Promethean board they would have screened the videos. However, SeeSaw was downloaded on Barbara's iPad but not on the other ones, so only one group was able to upload it to SeeSaw while the rest saved the videos but were not able to share. Eventually only one group screened the completed project. Later on, the tech person (who was the only one authorized to download apps), installed SeeSaw on all the iPads, and in another session, students uploaded their work and screened all the videos.

During this observation, as a researcher, I had to choose either to help teachers or to document the activity without interfering. Unlike times when the participants asked me for direct help as I was videotaping their media production activity, the two teachers were working together to figure it out and asked the students as well. I

decided not to jump in and let them solve the problem as they collaborated between themselves and with their students. It was difficult to witness their frustration and not offer help, but retrospectively, it allowed them to work it out by themselves and solve the problem without external help.

Sarah was able to reflect on her trepidations and her way to cope with it:

I think I have a little phobia about technology. I worried about problems happening, but they are going to happen, and so you just have to go to plan B when there are glitches. I accepted that it's not the end of the world when there is a problem. When I developed this attitude I also learned that most problems can be resolved. Sometimes my students help resolve problems and it's good for them to see and accept that glitches are part of technology. You are not so afraid to try new things when you develop that attitude. (Sarah, second individual interview, 05.21.2015)

As for relevance and educational value, some media production activities did not always reach the expected outcome (like any instructional strategy in class). When Sarah explored new digital media tools with her students, it was initially a trial-and-error exploration process and it might not necessarily be connected to educational outcomes. While some practices were meaningful, others were less valuable, but all the media production in class involved pleasure, play, and the process of messy engagement in learning.

Connecting Media Production with Educational Standards

If a person had stepped into Sarah's class while the students were producing media, he or she might have wondered if the students' noise and movement could

result in a meaningful learning experience. But students' messy engagement is part of media production. For example, during the stop-motion animation activity with the enrichment teacher, each group was standing near a table and creating the animation. Figure 4.11 shows some still images from video collected during this activity. The noise and the students' movement might have looked disordered to an outsider and yet the students were engaged, on task, and working diligently to produce the media collaboratively.

Figure 4.11. Stop Motion Animation Activity in Sarah's Class. April 6th, 2015

The Glogster activity might have been perceived as more organized, as students worked on their Glog while sitting at their desks and working on the laptop. But since Sarah's class was learner-centered, students felt free to come to Sarah and

ask questions or go to their peers for technical questions, such as how to embed a link for a video. When the whole class of twenty students was engaged in their Glogster project, the class became noisy and students walked over to get or provide support. What might have looked to an outsider like disorder was actually part of the students' engagement and work on synthesis and creative process. While, in general, this differentiated instruction strategy worked for most students, sometimes some students were left alone, as Sarah pointed out in her interview:

Sometimes it is messy; it doesn't always go the way you expect. A student has problems and some are obviously better than others in terms of their skills.

These are some of my worries. Is the quiet one who is not producing much getting as much as out of it as the ones who are flying with it? But this is teaching, period. (Sarah, first individual interview, 03.09.2015)

Besides the messy engagement, the pleasure of producing media can sometimes overshadow the educational value. As Sarah questioned the benefit for the four students who produced the place value video, she also reflected on how she adapted traditional assignments in ways that provided digital enhancement. For example, the Book Hook project was a glamorized version of a book report. Instead of writing a personal report and handing it to the teacher, students read, analyzed, and then created a video to advertise the book for other students. The students handed Sarah their analysis and their script. After it was approved, they could go to the library media specialist to film in the TV studio at the school library. Once the video was filmed and edited by the students in the library, they came back to the class to evaluate them and post them on the class blog. Figure 4.10 shows one frame from one

Book Hook video where the students at the end showed the book while advocating reading it.

Sarah reflected, during the interview, on the process she used for script evaluation and the revision process. When Sarah saw the results, which were very entertaining and creative, she asked herself if the students had learned just the technical and artistic components. She struggled to find evidence that showed a deep analysis and syntheses of the book (Sarah, second individual interview, 05.21.2015). Unlike the Glogster project, the students' pleasure and play resulted in a technically sophisticated product that, while attractive, had little depth of academic content. It had the main theme, but the description of the plot and the characters did not offer any critique of the message of the book. In the Book Hook assignment, Sarah received support from George so that students were able to advance their skills of presenting, filming, and editing; however, from my observation and analysis, the summarizing, analyzing, and synthesizing involved in a book received less attention from Sarah. Figure 4.12 shows the last frame on one of the Books Hooks where the students described the book and showed it to the camera with the green screen used to have stars in the back. Figure 4.13 shows the group filming at the library green screen studio.

Figure 4.12. Screenshot of One of Sarah's Students Class Book Hooks

Figure 4.13. Sarah's Students Filming under George's Guidance at the Library

When Sarah reflected on her trepidations, technical issues, and messy engagement using media production in her class, she was challenged but not paralyzed. She developed a sense of mastery as she problem-solved and was supported by her community of practice. Sarah's mastery was evident in her talent to design and adapt traditional classroom assignments into structured activity that was systematically organized to integrate media production for educational value. She gave students choice and enhanced their digital and media literacy competency (AACRA model) through formative and summative assessment. Many observations revealed her comfort to share control with her students. While she had anxiety about technical glitches, educational value, and messy engagement, she was not paralyzed when she encountered these challenges. She learned to see these challenges as an opportunity to work on authentic problem solving and as a way to engage her students as active learners. Her students demonstrated their reading analysis as well as their speaking skills. Since this process did not occur by itself, next we will analyze Sarah's process to gain a sense of reassurance to explore media production in her class.

Autonomy: Embracing the Reassurance to Play

We have explored Sarah's relatedness as she shifted her motivation and found shared goals with her colleagues. We analyzed Sarah's mastery as she went through a process of being tenacious and facing challenges as she used the AACRA model to integrate media production. Now we will look at her autonomy as she allowed herself to practice trial-and-error experiments with media production in her classroom.

Autonomy is the reassurance to explore. In the context of the elementary school, we must consider how teachers get their reassurance to implement media production with all its challenges; how the teacher balances between highly structured and playful activities; and how teachers experiment, practice, and learn through trial and error. Sarah intentionally placed herself in situations that challenged her perceptions, knowledge, and her skills in integrating media production into structure. She explored, through play with her students, how to incorporate media production in different subject matters. She provided guidelines such as the rubric in the Glogster project or the script in the Book Hooks project to allow a balance between evaluation and the students' learning process. As a lifelong learner, Sarah was inspired by successful work developed by other educators, and she built upon what she learned from others. Sarah was reassured from the work developed by her colleagues, which enabled her to move away from the rigidity of the standard curriculum.

Sarah was one of the most experienced teachers at Ocean Elementary. Sarah's confidence in implementing digital media production activities came from her status as a leader in the school community and the larger context of the digital literacy initiative at Ocean Elementary, a place that has historically endorsed innovation.

Sarah is sensitive to the pressures associated with the implementation of the CCSS and the administration of PARCC and other state standardized tests, where there is little time left to explore new ideas. Students must be prepared for two months of testing. In addition, the district is giving two PD days that usually are related to any new curriculum connected to the CCSS and an option for financing half of the cost of an outside professional development opportunity.

While the community adheres rigidly to the CCSS, during the 2014–2015 year, they also encouraged digital literacy. Teachers recognized that embracing both values offered an ambivalent message. Still, Sarah valued the opportunity to implement digital literacy. She explained that a door opened for her when George, the library media specialist, came back from the Summer Institute in Digital Literacy and talked Charlotte, the literacy coach, into digital literacy. Sarah started to be encouraged because both George and Charlotte were “so jazzed up and excited about the technology and really, learning about media literacy in the sense of what kids need to do” (Sarah, focus group, 05.26.2015). Once Charlotte organized for the book club to read Dr. Hobbs’ book, the two-year initiative started. The initiative included George building a TV studio at the library and Charlotte and Grace supporting JEPD in digital literacy. In an interview, Sarah acknowledged her supportive environment:

We are lucky to have a school that offers all of the equipment that we have.

That’s huge, and with that we have an atmosphere where people encourage you to try new things. That’s a good thing too, and we have support from each other. I think that’s the most important thing right there. (Sarah, first individual interview, 03.09.2015)

Sarah's autonomy exists in the context of the digital literacy initiative, which was financially supported by the school district. Dr. Hobbs provided regular PD to a group of leaders in the district and to the school Catalyst Teachers in the elementary, middle, and high school. Before taking on the role of researcher, I came to give digital media workshops, and later on, I supported teachers' media production practices in Ocean Elementary for three days a week. I worked with Sarah to brainstorm how she could use media production in her class, like the use of Animoto. During the sessions with Dr. Hobbs, Sarah experimented with different tools, such as Videolicious, Screencast-O-Matic, and Twitter. Sarah valued the presence of outside experts in the school "because you don't know what you don't know. And when you see what can be done and have somebody to spearhead that piece... then you can choose what's going to work for you" (Sarah, focus group, 05.26.2015).

Permission to Play: Learning to Give Control to Students

In many opportunities during the four interviews, Sarah repeatedly used the phrase "let it go." She said, "The willingness to try new things and letting it go and not worrying that it's going to be perfect is one of the biggest things that I had to learn in the beginning" (Sarah, first individual interview, 03.09.2015). Sarah was self aware of her teaching and knew the best ways to advance her practice. "When I sit in workshops and see people do things, I don't learn well that way. I have to do it myself and try and see the mistakes and work through it that way" (Sarah, second individual interview, 05.21.2015). This is why the initiative to integrate digital literacy at Ocean Elementary using hands-on professional development was right up Sarah's alley to

explore the possibilities that it could offer to her experienced practice as a home room teacher in 4th grade.

Sarah pointed out four components that promoted her exploration of media production: the support she received from the coaches, her reciprocal work with her peer teachers and students, the quality of student work, and the university partnership. Sarah was already familiar with tools like Glogster and Animoto before she understood the full capacity of them. After participating in the Summer Institute, she deepened her understanding of the connection between media production and educational value (Sarah, second individual interview, 05.21.2015).

Sarah's reassurance to explore media production was a two-year process that started with the excitement of her colleagues and continued with her trial and error in class to connect the practice with educational content. First, the literacy coach together with the library media specialist shared the importance of using digital literacy and media production to enhance students' learning, use differentiated instruction, and engage them to take an active part in their learning. Second, the book club allowed the teachers with the same educational goal to have a reciprocal process of reading Dr. Hobbs' book and sharing ideas about how to implement their ideas in the classroom. Third, having Dr. Hobbs and myself as outside experts in digital literacy and media production provided examples of best practices and an authority to allow playing with digital media in the classroom.

While trial and error was Sarah's way of learning how to use media production with her students, it had its challenges, as sometimes it was only retrospectively that Sarah connected the educational value. "Sometimes it is just

playing to learn, letting students learn the technology. Sometimes I take this first step before asking myself how the technology can be used well. You're not sure how it will work until you see students use it" (Sarah, focus group, 05.26.2015). Sarah stated that she found it hard to measure students' learning when they produced videos, unlike the Glogster activity, where she was able to assess their learning with her rubric. Nevertheless, she had a sense of autonomy to choose to integrate media production in her class. Although Sarah did not always see the educational value, she was able to see an increase in students' engagement. At the focus group, Sarah said, "sometimes I am not sure we can make a case that it makes something better, but it makes it just as good and better in the sense that the engagement is so much more" (Sarah, focus group, 05.26.2015). Furthermore, she connected it to her motivation to teach digital literacy to a generation that would constantly download, upload, and produce media online.

Becoming a Digital Literacy Mentor

Table 4.4 is an index of Sarah's process, going through the stages of relatedness, mastery, and autonomy to successfully implement media production. Figure 4.14 describes the same process visually to follow Maslow's hierarchy of needs as Sarah went through these chronological processes. As a Demystifier, Professor, and Tastemaker, with a balanced attitude toward protecting and empowering children in relation to mass media, digital media and popular culture, Sarah was motivated to teach digital and media literacy to cultivate an inquiry practice, asking critical questions such as "how" and "why" about the media messages and connecting it to the curriculum. Her motivation led to a collaborative

effort to explore the shared goals and instructional strategies. Sarah related to her peers and felt how collaborating with them would benefit her students and herself. Building her confidence in using media production happened through the school's community of practice, include the coaches, the library media specialist, the fourth-grade teachers, the Catalyst Teachers, and her students. She used the AACRA model to teach her students to access digital technology and to locate reliable information, analyze the historical figure's impact and synthesize it into a narrative, create a multimedia text that was coherent to others, reflect and evaluate peer's work, and showcase to friends and family the importance of the historical figure. Sarah made sure to provide educational outcomes that she felt were aligned with the CCSS. Her teamwork with her students, Barbara, and her work with George enabled her to address the trepidations, the classroom messiness, and the teaching issues she experienced. Being tenacious led the way for Sarah to be creative as a teacher in her classroom and model her students' problem solving. She received reassurance to use media production from in- and out-of-school support. Her peers, the library media specialist, and the literacy coach influenced Sarah's initial motivation. Then, taking part in the book club and in the Catalyst Teacher group established a safer ground to explore the shared goals that the group discussed and agreed upon. Last, our presence as outside university experts who showcased best practices and encouraged play provided a push to help Sarah move outside of her comfort zone. She was able to balance a systematic organization of lessons that let the students play by using a rubric for peer evaluation and free choice of content.

Sarah transitioned from being an experienced teacher who valued educational standards and students' learning to a digital literacy mentor who connected learner-centered practices with CCSS and media production. Sarah's process developed her self-determination to integrate media production. She used media production in original ways and was playing with this pedagogy as her students learned to use it in math, science, English language arts, and social science and used EduBlog and Seesaw to share it with the community. This process showed the process of Sarah redefining her role as a teacher to become a mentor.

Table 4.4.

Sarah as a Self-Determined Digital Literacy Mentor

Relatedness	Motivations Shared Goals Collaboration		Demystifier, professor, taste-maker Learner-Centered Library media specialist, kindergarten teacher, enrichment teacher, her students
Mastery	Competence	Access Analyze Create Reflect Act	Computer/Internet/Search Historical figure Multimedia poster Peer feedback Showcase to friends & Parents
	Process		Procedure that aligned with the CCSS using different applications
	Trepidation		Technophobia, content relevance and messy engagement
Autonomy	Reassurance		University partners, media specialist and coaches
	Structure Exploration		Rubric, pre, production, post Edublog, Twitter, Seesaw

Figure 4.14. Sarah's Self-Determination Model

Chapter Summary

Sarah's two-year journey to deepen her use of media production had several stages that scaffolded her relatedness, mastery, and autonomy to integrate media production in her class. Sarah changed her motivation after relating to George and Charlotte arguments about how media production enhances learning. She worked collaboratively through the AACRA model stages to master the use of media production with traditional activities. She learned to "let it go" as she was reassured by in- and out-of-school authority figures to explore and be autonomous in her class. Sarah was an experienced teacher who was the lead teacher for the 4th-grade level. In the school, she was seen as a professional educator who successfully connected her instructional strategies with her content knowledge as aligned with the CCSS. Grace,

the math coach, explained that Sarah and the kindergarten teacher were “able to break things down to a level where the rest of their team understands what we are doing and bringing it back to reality” (Grace, focus group, 05.26.2015). It is no surprise that with her personal characteristics, Sarah would be one of the first to explore media production. Her trepidations from technical failure, disorder in the classroom, and the connection between media production activity and educational goals were addressed to allow her to play with the activity in her classroom with her students.

Sarah’s case study is an example of how an experienced teacher can develop her understanding and practice of media production. Her support and relatedness were the keys to her transition to become a digital literacy mentor. She connected her well-structured lesson plans to media production by modifying the structure and adding more educational goals. The reassurance and acknowledgment encouraged her to keep integrating and exploring how it could be even better. Sarah’s journey can teach us about in-school support and out-of-school inspiration to implement traditional lesson plans with playful and meaningful new digital practices such as media production.

Chapter 5

Co-Teaching Media Production

On March 6th, 2015, Ocean Elementary had a professional development (PD) day. As I was walking on my way to the library to the faculty meeting, I stumbled on Isabella, who surprisingly had on glasses and a doctor's headlamp while Sophia, who stood near her, was wearing a green octopus hat (Figure 5.1 shows the two teachers in their costumes.) I asked them, "What is going on?" Isabella replied, "Well, you haven't seen our last 'Teacher Talk' video for our PD day session?" Tonia added, "We are Dr. Noah Little, and Dr. Noah Lot." Obviously, I had missed Isabella's last upload on YouTube.

Figure 5.1. Isabella (right) and Sophia (left) Preparing for their PD Day Session.

Isabella started to upload videos on her YouTube channel in November 2014 while being part of the Catalyst Teachers group. Together with Sophia they featured short video they named "Teacher Talk." In the video for the March 6th PD day, Isabella introduced herself as Dr. Noah Lot. While she was looking for her assistant, Sophia came from the background, sprayed water from a syringe, and introduced herself as Dr. Noah Little. After calming down the goofy and excited character of

Sophia, Isabella continued. She explained in a high didactic voice that they were going to showcase how to integrate technology into a science lesson using video, YouTube, and annotation. Sophia kept interfering with her colleague by making faces and gestures behind Isabella's back. Then Isabella turned to Sophia, saying that it was her turn now. Sophia, in a lower voice, explained that they would also address the Common Core State Standards (CCSS) in regards to writing, reading, listening, and speaking skills. Isabella turned on the music, and then the two characters started to dance, as can be seen in figure 5.2. This hilarious video was shared with the teachers of Ocean Elementary to promote Isabella and Sophia's session for the PD day. The personas of Dr. Noah Lot and Dr. Noah Little extended from the screen to the school as Isabella and Sophia performed these characters at the PD day.

Figure 5.2. Isabella (right) and Sophia (left) Dancing at the End of Their Video.

February 26th, 2015.

Introducing Isabella and Sophia, Grade 4 Co-Teachers

Isabella and Sophia were the only full-time co-teachers in the school. Their 4th-grade class was an inclusive class of twenty students, from which nine had special needs. They collaboratively implemented media production. This case study portrays two co-teachers who supported their mutual advancement and self-development through practice. Isabella was the special education teacher who had worked with Sophia since 2010. Both had received specialized education (Isabella received an M.A. in special education and Sophia received an M.A. in reading). Isabella loved to search for new ways to engage her students using digital tools. Sophia was formerly a reading specialist and became a fourth-grade teacher in recent years. While Isabella looked at different ways to integrate media production into the curriculum, Sophia looked at ways it promoted the students' social and emotional skills as well as their literacy skills as aligned with the CCSS. During the year in which this study was conducted, Sophia was the full-time 4th-grade teacher in charge of instruction and students' learning for the CCSS. Isabella was a case manager for the nine students with special needs. Often, Isabella would take one or several students to her intervention room and provide additional support for their learning in a special area or module. Though their official responsibilities were defined as one full-time teacher and one case manager, they decided to work as full-time co-teachers with equal responsibilities and almost equal time of instruction. Only when a student needed an intensive intervention that Isabella or Sophia could not provide during the regular

class would Isabella find time to work with the student in her intervention room. This chapter showcases Isabella and Sophia's unique experience that allowed them to have the opportunity for trial and error in their classroom with their students.

Isabella and Sophia's 4th-grade class had twenty students, of which nine had special needs. In order to teach all of the subject matter and follow a strict curriculum in math and a more open curriculum in science, English language arts, and social science, Isabella and Sophia came up with different activities to engage their students. Both, like Sarah were teaching all subject matters and connecting it to the CCSS. They were trying to explore how to engage all their students and deepen their learning. Though Sophia had her trepidations and reservations about making media, it was Isabella's enthusiasm, scaffolding, and professionalism that allowed Sophia to go out of her comfort zone and explore the possibilities in media production at the fourth-grade level. They also had the support of the literacy and math coaches to help them align their activities with the CCSS. The library media specialist, George, facilitated the video production of the book trailers at the library. While Isabella and Sophia guided the brainstorming and scriptwriting, George oversaw the filming and editing of the video productions. In addition, Isabella and Sophia had their YouTube channel that they use to upload inspirational videos for their students and the school teachers. During the March 6th PD day, like Sarah and Rachel, they offered a session about their integration of media production with the 4th-grade curriculum.

This chapter describes the collaborative work of Isabella and Sophia as co-teachers. More specifically, I describe their mutual process of implementing media production, as they each affected their colleague's relatedness, mastery, and

autonomy. First, I portray Isabella and Sophia's motivations and their co-teaching as well as their engagement with Ocean Elementary School's community of practice. Second, I analyze their book trailers project. Third, I describe their reciprocal process, where Isabella encouraged Sophia to step out of her comfort zone while Sophia was making sure there were structures and guidelines. Their case study showcases how co-teaching can help teachers shift to a learner-centered pedagogy using media production as they become digital literacy mentors.

Relatedness: Why Co-Teaching Advances Changes in Attitude

Both Isabella and Sophia took the survey separately and answered questions about their perception of using media in their classroom. Table 5.1 shows the individual responses of Isabella and Sophia in relation to the overall mean scores for the entire faculty of Ocean Elementary. They were very similar in their frequency of media use in their classroom, and their self-reported scores were higher than the average of the entire faculty at Ocean Elementary. They reported using media at least several times a week and, interestingly, they reported that they used the Promethean board and the Internet more often: at least once a day.

There are distinct differences in the way that Isabella and Sophia interpreted the practice of media production. Sophia saw media use as more video based; Isabella had a broader view. While for Sophia, video recording and media production were the same and she perceived herself using it only once a week, Isabella used video recording only once a week and media production several times a week. Isabella's more frequent use might be because of her particular role as a special educator.

Being a special educator, Isabella was eager to research the best solution to accommodate her struggling students. Sophia, as a previous reading specialist, looked at the instructional strategies to deepen her students' learning. Together they both valued differentiated instruction. Together they applied different approaches to implement it in their inclusive classroom. With the support of job-embedded professional development, the coaches, and the media specialist, Isabella and Sophia started to integrate media production since 2013 when the digital literacy initiative started. They explored how to make book trailers, to replace the traditional book report and to screencast problem solving in math using Explain Everything. Even though they received support, Isabella started to explore digital learning outside of school using Twitter and YouTube as a form of professional development. She brought back ideas to share with Sophia.

Table 5.1.

Isabella and Sophia's Self Reported Frequency of Using Technology on a Five-Point Likert Scale

	How often are you using media production in your classroom?	How often are you using the Promethean board in your class?	How often do you use Internet during your classes?	How often are you showing videos in your class?	How often are you using a video recording during your class?
Isabella	3	4	4	3	2
Sophia	2	5	3	3	2
School	1.9	4.125	3.69696969 7	2.71875	1.212121212

Note. Survey taken by Sophia on March 19th, 2015 and by Isabella on March 20th,

2015

Motivation: Media Production for Student-Centered Learning

Both teachers are student-centered (Spirit Guide and Motivator), and these motivations remained consistent over time. Each one of the co-teachers was coming from a different approach to teach their 4th graders, and yet both valued the same educational outcomes. Figure 5.3 shows that In the October survey, Isabella was first a Techie, Demystifier, and a Motivator. In the March survey, she was a Spirit Guide, Techie, and Demystifier. In interpreting these results, Isabella expressed her disappointment that Motivator was lower than she expected. When I explained that Spirit Guide and Motivator are both representing the underlying concept of being learner-centered, she was relieved. But it's important to note that she highly valued the concept of Motivator.

As Figure 5.4 reveals, Sophia's profile did not change over time. She was a Motivator, Demystifier, and a Spirit Guide. Both Isabella and Sophia were learner-centered and valued "pulling back the curtain" on system constructs. But Isabella had the Techie part that valued media production and thus she tended to push Sophia to experiment while making sure that the other motivations and goals were valued.

Figure 5.3. Isabella's Digital Learning Profile Taken on October 1st, 2014 and March 20th, 2015

October

March

Figure 5.4. Sophia's Digital Learning Profile Taken on October 1st, 2014 and March 19th, 2015

Sophia's attitudes towards the potential risks and harms of digital media changed substantially from October to March. In October, Sophia's protect score was 73 and 70 in March. But her empower score rose dramatically from 56 in September to 68 in March. By contrast, Isabella's attitudes were more stable over time. Isabella's protect score was 76 in September and 73 in March and her empower score was 81 in September and 77 in March. In both October and March, Isabella kept the same ratio between empower and protect. Isabella's score changed by four points, keeping the balance between empower and protect while Sophia's empower score went up to almost be equal to protect. When I asked her about this change, she answered, "When I was answering these questions, I knew that something was going to change. I have given up my fear and kind of letting things happen more after listening to others and seeing all the stuff that they are doing" (Sophia, first individual interview, 03.20.2015).

In order to understand their motivations for integrating media production, we first need to understand how the sense of shared goals between the two co-teachers was established. Isabella was looking at media as a tool to reach and engage the students in and out of school, and Sophia saw the media as a potential online threat. During the year, after experimenting with different tools, some failed and some were successful. Sophia was more open to using media to teach social responsibility and become literate with digital media. Sophia explained that she liked to have systematic structure while keeping the students' learning in mind. She expressed her concern that while she liked to use the trial and error process to explore what worked for her students; sometimes too many trials could do a disservice for the students (Sophia, third interview with Isabella, 06.18.2015).

In order to reduce Sophia's frustration from not knowing what worked for the students, Isabella modeled a student-centered approach using media for learning. Isabella was quite intentional and enthusiastic about her orientation towards empowerment while she was looking at and interpreting her score:

It also comes down to not only what happens in the classroom but outside of the classroom students. I mean, I can share with the students what we do in the class and they can come home, come back, and have all these fabulous examples that I even know about. But I can't protect per se. I can empower them to do these things, and I can kind of be a spirit guide for students and teachers. (Isabella, first individual interview, 03.24.2015)

As a team, Isabella and Sophia balanced each other to be structured and aligned with the curriculum as well as playful to try new tools to better engage students. For both

of them, they wanted to enhance their students' learning and make sure they were socially responsible in the digital era. But they were not always a two-member team; they took part as Catalyst Teachers and shared with others.

Shared Goals: Why Co-Teaching Affects Motivation

Isabella and Sophia took part in the book club, the Catalyst Teachers group, and offered a workshop at the March 6th PD day. Isabella joined the Catalyst Teachers to share her enthusiasm to explore new tools and bounce ideas, whereas Sophia joined to push herself out of her comfort zone like Sarah did. In addition, Isabella created a YouTube channel called Teachers' Talk, where she and Sophia made inspirational videos for their students and created tutorials for their peer teachers. Isabella started uploading videos to her YouTube account in November 2014, shortly after the Catalyst Teachers group started to meet. In different occasions, such as DigiPlayground and the March PD day, Isabella used her YouTube channel to have video materials for other teachers see example of her use of how media production in her class was aligned with the CCSS. Each one also provided professional development in their area of expertise. Isabella was part of a group of special educators and service providers who gave a statewide workshop for special educators on how media production was used at Ocean Elementary. In the summer of 2015, Isabella also gave a workshop on the same topic at the Summer Institute in Digital Literacy. Sophia, as a former reading specialist, gave a PD in instructional strategies to enhance the reading skills for all 4th graders. The community of practice at Ocean Elementary also supported them to learn new practices and to execute their ideas for media production.

For video projects, the library media specialist, George, supported their students by providing the professional guidance to film and edit videos. In her interview, Isabella referred to George as her “go-to person.” She explained how she liked to go to him and brainstorm how they could collaborate (Isabella, first individual interview, 03.24.2015). In one of my observations, I documented a planning meeting in between classes where the three sat in the library and outlined the process to have the students create videos for their book trailers projects. George was explaining the professional process of filming and what he could do to support it. Sophia took out the scripts that each group made and wrote down what George was commenting on. Isabella explained what they thought would be the plan and what the students did so far. They scheduled the times that the students would come to film and the deadlines for editing and showcasing in front of the class and guests. As mentioned before, George’s support allowed Isabella and Sophia to produce video without taking charge of the filming and editing. This support from George released the pressure from Isabella and Sophia to be proficient in video making and guiding a filming or editing session.

Besides their peer educators and support team in Ocean Elementary, Isabella and Sophia had other communities of practice that supported their use of media production in their class. Their students helped and taught both teachers how to use different features of an application or a digital device. Moreover, both Isabella and Sophia were going outside of the school community of practice and searching for resources. “I also tap into resources on Twitter—things like that—and share and read articles and research articles“ (Isabella, first individual interview, 03.24.2015).

These limitations of each community of practice made the partnership of Isabella and Sophia a reciprocal one based on their trust in their shared goals.

Collaboration: Applying the Strengths of Each Co-Teacher

Like a true creative team, Isabella and Sophia derived strength from the other. Each one's ideas seemed to inspire and stimulate the other. Sophia explained that although she liked being part of the book club and talking to other Catalyst Teachers, it was working with Isabella and witnessing her work that persuaded her that media production could be doable in her class. Sophia confessed that she liked to see demonstration rather than talking or reading about a practice (Sophia, third interview with Isabella, 06.18.2015).

Their co-teaching was beyond the in-class pedagogical practice and extended to planning and socializing with each other's families. I observed Isabella and Sophia working together several times and I saw them share responsibilities. As a result, they managed their class effectively. For example, while one was talking, the other supported one group or an individual student. When they used technology, Isabella was in charge of showcasing the activity and of troubleshooting any glitches. Sophia either gave the instructions, explained the goals, or supported the group planning by giving them advice to modify their content. Isabella explained:

Our mindsets are so different. But collaborating and being able to talk out our ideas and putting something together as far as the two of us. It is like Bang! It's dynamic. Maybe not always dynamic because we are not expert, but being able to kind of roll things off each other, we might get more ideas than we

thought we had to begin with. (Isabella, second interview with Sophia, 05.27.2015)

They were flexible enough to change their plan when one was called to a parent conference or one student needed personal attention. They knew each other well enough and trusted each other so that with a simple gesture they could agree or discuss to modify their plan. In one conversation, they explained their working relationship to me:

Sophia: I like to bounce ideas off Isabella because, like, I can come up with something and then she will come up with something and then, like, we will come up with something together but we have different ways of looking at it and it's really fun to kind of get to the piece that we are actually gonna do.

Isabella: Yeah, that's true. Or I'll come in and be like, "I just thought about this crazy idea, what do you think?" and usually she'll be like, "Let me think about it for a little bit," and then I can warm her into it.

Sophia: Well, not everything she thinks of!

Isabella: That's true. (Isabella and Sophia, third interview, 06.18.2015)

As co-teachers, Isabella and Sophia worked effectively together. They started by sharing an idea, brainstorming different strategies that would benefit their students best, and then coming up with a plan of action. Both understood that they were in a unique situation. Especially for Sophia, having Isabella promoted her mastery since she was a more hand-on learner. Sophia said, "I can watch any video there is and not get a lot out of it...whereas if you are more immersed into it, at least for me...see it

happening, then I feel a little bit more confident and comfortable” (Sophia, third interview with Isabella, 06.18.2015). As we will see in the next section, Isabella and Sophia’s relatedness opened the door for them to become confident with teaching media production.

Mastery: Building Upon Familiar Pedagogy

Since they joined the Catalyst Teachers’ group, Isabella and Sophia had several opportunities for their students to experience media production as part of their learning. I observed five different uses of media production in their class, as can be seen in Table 5.2. They decided to use media production activities such as creating book trailers instead of a written book report, screencasting their math problem solving, documenting their science experiments, and designing a brochure for their visit to the State House. During five months of observations, I mainly focused on observing the book trailers project. The students worked on a promotional video for 1st-grade students to read a book from a local author. The students grouped up, read the book, analyzed it, wrote a script, chose a picture, or drew an illustration of their script; they recorded their book review, presented the video in front of the classroom to receive feedback, and showcased it in front of a 1st-grade class and the author. In a math intervention group, the students screencasted their process of problem solving that was shared with other students and teachers. In their electricity project, as part of the science curriculum, the students used the iPads to document how to have a closed circuit of electricity. In order to prepare the students for their visit to the State House, Isabella and Sophia created a Prezi that was the road map for a virtual scavenger hunt.

This activity promoted students' research of facts about the State House. Then the students designed a brochure that was highly valued by the State House officials.

Table 5.2.

Isabella and Sophia's Various Uses of Media Production in Class

Project name	Subject	Format	Tool	Duration
Book Trailers	Literacy	Video	Cameras/Computers	6 classes
March-June 2015				
Electricity	Science	Video	iPads	1 class
May 2015				
Problem Solving	Math	Screencast	Screencastify	2 classes
April 2015				
Instructional Video	Recess	Video	Cameras/Computers	3 recess
January-May 2015				
State House	Social	Multimedia	YouTube, Prezi,	4 classes
Scavenger Hunt	Science		Word	
May-June 2015				

Isabella and Sophia were intentional and strategic about how to celebrate inclusion as a social value for all learners. They were able to use media production to

approach and enhance the skills of special needs students so that they could shine. Having an inclusive class with nine out of twenty students with special needs, each one of the students was assigned in a typical group. Since video production has different roles with different expertise, each student was able to play an active part and contribute to the project.

During one of the focus groups, Isabella gave me an example of her work with the students with disabilities. She said,

There is a student in my classroom who has a pretty severe disability, and you could say...he had a shy personality because he does not communicate often. He is more of an introvert. Yet, his technology skills are unbelievable. If I ask him to open up his iPad and show me things, he is able to show me things and do games and communicate in a different way, but his personality is so much of an introvert and he doesn't even talk. To say whether or not he perseveres, it depends on his level of interest and what the level of expectation is. I think it is just different for everybody. But his background knowledge in navigating through all of that is different than mine. Yet he is able to do it more because he had that exposure and that experience as well. (Isabella, focus group, 05.28.2015)

This example portrayed one case in which Isabella and Sophia's effort was important for the student's development. In the next section, I will describe how they used media production in a group to have Book Trailers as part of their literacy work and advocacy for book reading to 1st graders.

Book Trailers as Media Production

The idea for Book Trailers came up as a way to have an authentic audience. Isabella and Sophia's students would stimulate the 1st-grade students to read the book. In addition, the local authors and illustrators would come to be part of the audience for their showcase. Instead of having the 4th-grade students read and hand out an individual book report, Isabella and Sophia decided to give them a media production project. They gave their students a book, *Tyler's TALL Tales: Chasing the Moon*, by local children's author Ashley Richer (2014) and local illustrator Ryan Maguire. Figure 5.5 displays the cover of this book. This book was targeted at Grade 1 readers, and after reading the book, students created a trailer where they informed this younger audience in an entertaining way. Each group analyzed the book, created a visual representation, and wrote a script. Once approved by the two teachers, the students went to the TV studio in the library, and with support from George, they filmed and edited the video. Students learned to use a green screen to share their hand-drawn artwork; in the editing process, they imported files and assembled them in sequence. They selected royalty-free music and decided how to strategically incorporate it into the production. They used special effects, including learning to crop, rotate and resize moving images.

Figure 5.5. The Cover of *Tyler's TALL Tales: Chasing the Moon*

All five Book Trailers were reviewed in class and were showcased in a special visit by the author and illustrator and a 1st-grade class. Sophia explained to me that this version of the Book Trailers was a modification of a previous work that Isabella had done using Videolicious. Earlier in the school year, Isabella tested with her students making a videotaped book report as they recorded themselves on iPads using the Videolicious app. However, this time, George suggested the use the green screen and the idea of having Grade-1 students serve as an authentic audience. The fact that the author and illustrator came to the school for a visit contributed to the students' engagement since they were excited to talk about the book. For Sophia this was a good use of media to playfully work on her students' literacy skills as they motivated others to read. (Sophia, first individual interview, 03.20.2015). The activity took place over two months between April and May 2015.

The Book Trailer activity had all the five digital and media competencies from the ACRAA model (access, analyze, create, reflect, and act), as can be seen in Table 5.3. The students learned to read and analyze the book, write a script, use drawings to represent their script, film a narrative video promotion for the book, reflect upon their creation, and screen it to advance the 1st graders' reading. While producing the Book Trailers the students faced a variety of technical challenges. For example, one of the edited versions was not saved and needed to be re-edited. Students learned to problem-solve technical glitches and collaborate as a team. They were able to voice their opinions and have ownership on their production in front of an authentic audience.

Table 5.3.

AACRA Model of Using Video Production in Isabella and Sophia's Class

Competency	Practice in Isabella and Sophia's Classroom
Access	Using video equipment and editing software
Analyze	Examining each page. Photographing and drawing as synthesis
Create	Videotaping and editing short trailer describing the synthesis
Reflect	Peer review of the video and filling out an evaluation rubric
Act	Showcasing the videos to the book authors and 1 st graders

In the beginning of the year, Isabella explored the option of creating media instead of writing a book report. Her students draw and put them together as a videotaped report using Videolicious. But as Sophia pointed out, having George available to help and with the TV studio in the library, they decided to expand the project and make it a media production with all the stages, including a showcase in front of the younger students and the book author.

Access. Learning to read, write, draw, film, and edit are basic skills that allow you to achieve a higher level of competency. Using their listening and reading comprehension, the students were able to access the book and understand the story. Moreover, during the editing, the students learned the use of the keyboard for more than the usual word typing or video games. They had to problem-solve many technical issues such as how to lower the volume if it was too high, how to use the green screen, how to create a spinning title, etc. They had to identify the relevant

information and curate it to make their video appealing and coherent to their 1st-grade target audience.

Analyze. The analysis was done in several stages and incorporated the use of student drawing as a means to demonstrate comprehension of the narrative story. The students analyzed each page of the book. Then they talked about target audience. Only then did they start to create the script. Isabella explained that the students had a lot of preparation to do as they went through the production stages. Isabella and Sophia scaffold the activity, explaining, “We read the book; I do not know how many times. They read the book within small groups. They analyzed each of the pages. They analyzed the text. Then we talked about the target audience” (Isabella, focus group, 05.28.2015). The analysis of the book page by page was done either by drawing or finding images that would represent visually the essence of each page (see Figure 5.6.). When Isabella reflected on the first draft of the findings chapter, she replied via email to my question about the analysis process. She wrote:

The criteria of the page-by-page analysis was to look at text features including illustrations, images hidden within illustrations, possible theme, characters, and plot. We had them analyze the story elements page by page and discuss with each other what they noticed on each page and what elements might have enhanced the story. (Isabella, personal communication, 09.29.2015)

The students developed the script and added the visual representation. Students worked in groups of three or four, and each production group received the same target audience: the 1st grade students that would watch the trailers and should be

encouraged to read the book. In addition, the students analyzed other trailers to learn from the professionals how it is done.

We show the students an example of a book trailer or trailer (like a movie trailer), and then we had a deep discussion afterwards, you know. What do you think the audiences intend or what is the theme? The message? What do you think went into producing this. And pulling that out of the students and showing them examples and stopping through things - how do you think they did that? Or what do you think their purpose was for that? How did that make you feel? ...We incorporate that into our lessons and that goes on throughout the year. (Isabella, first individual interview, 03.24.2015)

Figure 5.6. An Example of One Drawing Analyzing One Page of the Book

Create. The next stage was to write a script and look at a visual representation that would symbolize their analysis in regard to their target audience. As advised by George, the students had a sort of a storyboard to help them be ready with their filming. Figure 5.7. shows a sample student script, color-coded by children to identify

the different parts and the shots they were planning to record. Each one of the five groups produced one video. All groups enjoyed using the green screen. Some used the illustration from the book, and some used their own artwork as the background. The final videos were around one minute long. Most of the students would say a sentence about the book one after the other. With George's guidance, they added royalty-free music to be the score and titles to have an opening title and credits at the end. Some played with the special effects and cropped their own figure to show only their heads floating in the shot. All groups mentioned the name of the book, the location, the plot, and why the audience should read it.

Figure 5.7. Script of the Video Trailer with Color Coding

The video production project was motivating and playful from start to finish. From the joyful appearance of children performing on the screen and as I observed them in the library studio during filming, the students enjoyed the process. In some cases they enjoyed it so much that they laughed during the filming or recorded sentences that were not planned. To make sure it had educational value, Isabella and Sophia tried to have a meaningful reflection when the production was completed.

As a collaborative project that involved three teachers, each with their own values, there were important differences of opinion about the overall value of the project. Teachers demonstrated some reflection on their values about the quality of the student work and how to share this work with the target audience. Sophia was especially hesitant about screening all the final videos for the 1st graders, the book author, and the illustrator. She felt that the videos were not representing the book coherently and that many of the student videos, in their playfulness, did not accomplish the goals of the assignment. For example, in one video, a student was giggling in a way that made her language difficult to understand. Moreover, the use of special effects (as Figure 5.8 shows, the child's image was rotating and flying out of the frame), made it difficult to see her face and interpret her ideas in relation to the content of the book. From Sophia's point of view, the video production was a literacy assignment that should have emphasized analysis, synthesis of ideas, and effective communication to an authentic audience. Most of the final videos showed no evidence of analysis. The videos communicated a spirit of playfulness but did not offer any particular insight on the book itself.

Figure 5.8. Two Frames from One of the Book Trailers.

George, the library media specialist, invested a lot of time in supporting students filming and editing the project. Moreover, he emphasized their artistic and creative choices as he gave them a large amount of control over the content and format of the production. While he was guiding them into the technical skills involved in filming and editing, children had total freedom to play around with the ideas and content of the videos. George’s orientation towards critical media literacy reflected his belief that media production is a form of personal voice and agency. For example, George was fond of telling the story that, in one of his library classroom sessions, a student asked him, “Why are you giving us so much power?” He responded, “I am not giving you power. You have that power. You just need to think about how you are using it and for what purpose.” In this production project, he wanted Isabella and Sophia’s students to master filmmaking skills in order for them to understand how media messages are constructed. Students’ playfulness is a way to gain their engagement and appreciate their own power as media makers.

Isabella’s perception of the quality of student video productions for this project reflected her beliefs about the power of technology and the value of learning

to be a media producer. She was more forgiving of the poor content while agreeing with Sophia about her concerns. She believed it was important to screen all the student videos to acknowledge and honor student work. For me, this whole experience was part of a learning curve for both teachers and students. In a focus group conversation, these tensions were revealed:

Isabella: I wanted to show all of them. I do not want to do only this one; I want to do all of them.

Sophia: We will have a conversation about that.

George: Who is the “we” picking [which videos to screen]?

Sophia: Me and her.

Isabella: So part of me is nervous because we did tell them the target audience. And we did tell them in the beginning that the author and the illustrator are coming in and I shared the first one with them and they absolutely loved it.... But [the kids] are obviously connected with the book. (focus group, 05.28.2015)

In order to have all students screen their videos, a reflection session with an evaluation rubric would enable students to revise and modify their final productions.

Reflect. Isabella and Sophia asked the students to go back and review the final version of their video to evaluate whether it met the requirements according to the bullet points they handed out to them. Figure 5.9 shows the evaluation rubric used. Isabella said, “There was that reflection piece we had a little check list with questions

for them to fill out and reflect on each other when they had a shared and presented. The scripts were more open-ended” (Isabella, second interview with Sophia, 05.27.2015).

Book Trailer: Tyler's Tall Tales

Please place a check next to the guidelines that the trailer includes.

☐ images match the script

☐ actors speak clearly...not too slow or too fast

☐ the script has kid friendly language

☐ the trailer includes character, setting, and a quick peek into the plot

☐ the trailer ends with a hook to spark interest in reading the book

Figure 5.9. Evaluation Rubric for Book Trailers

Teachers were impressed that children viewed their productions and had ideas about revision. Going through a process of reflection and receiving peer feedback allowed the students to modify their composition if it did not meet the requirement or if their peer did not understand their message. For example, Isabella shared a case when the group members themselves said:

“I do not like how it sounds. Let me re-record that.” And they offer feedback for each other: “you might want to say it in a different way next time” and “I do not understand what you said about that” so they are almost critically analyzing their own work and reflecting on it while they are doing it. And I do not know if it is because they are engaged because they are learning more; it is

a deeper learning, but I think it is a whole bunch of things. (Isabella, focus group, 05.28.2015)

During their oversight of the pre-production process, Isabella and Sophia had a certain expectation of what the Book Trailers would look like as finished videos. Since George was supervising the production phase, Isabella and Sophia were not involved in the filming or editing. Once the video came back and the videos were screened in the classroom, they asked the students about the gap between the plan and their final version. They received some different explanations from the students about their reasoning. For example, the girls were laughing because the camera operator was making jokes or the illustration in the background was supposed to describe the town but with the green screen and the composition, the image was hard to see. The reflection process made it clear that the final product came out not as planned and not perfect, and still the book trailers had value and achieved their target once they reached their audience.

Act. Isabella and Sophia's 4th-grade students were very excited to have a real audience coming to watch their production outcomes. Figure 5.10 shows the author and illustrator visiting the classroom with a group of Grade 1 and Grade 4 students. Children prepared signs to welcome them and stood on their chairs to greet the 1st-grade students. During the showcase on June 16th, the audience saw all the Book Trailers and had a chance to ask questions. The 1st graders, their teacher, the book author, and the illustrator were interested to know more details about the production process and asked about each stage. The students explained the whole process and answered questions about the special effects and the use of the green room. Then the

author read the book and was answering questions as well. All in all, this positive experience reinforced the importance of how to convey a message effectively using media and how the producer should be socially responsible.

Figure 5.10. The presentation on June 16th, 2015 to the 1st grade and the authors

Isabella and Sophia's Perceptions of Students' benefits. As the students completed their project, they gained many benefits, such as learning to effectively use a new communicative tool and experience ownership, agency, inclusion, and problem solving. The use of the book as the basis for the script, the drawing, and the videotaping taught the students to use media effectively to transfer their message about the book. George pointed out during the focus group that these activities of

Isabella and Sophia gave ownership and agency to the students. They learned to voice their opinion and be confident. Standing in front of the camera and showcasing their work while being acknowledged promoted the students' sense of agency. For the students with special needs, this agency was even greater. Students with reading or writing difficulties could shine using other type of media. The Book Trailers teamwork activity used diverse media that each student could contribute with their particular strength. Learning to work in an inclusive environment promoted the students with special needs as well as the typical students. Having many different levels of challenges during the process allowed different team members to solve the problem differently and value diverse ways of thinking. As Isabella explained, "I think problem solving is probably the easiest way to incorporate it (media production) because the kids need to go through that sequential step by step and explain it and show their work" (Isabella, second interview with Sophia, 05.27.2015).

Benefits for Co-Teachers. Along with students' engagement throughout the project, Isabella and Sophia benefited from having an authentic learning experience that promoted their own co-teaching. Brainstorming, planning, and executing this complex project enhanced their collaboration as they kept developing as co-teachers. The successful showcase also increased the visibility of their unique pedagogy. It showed not only how creative and thoughtful their students were; it connected the community with the school. Last and maybe most important, the activity was used as a form of formative assessment all along the project. Sophia described the process when she walked in the class and looked at the visual representation as well as the

written script she could have an assessment of the students stage. Using media production in the classroom is a demanding task, and though it was successful, it was a long and frustrating experience because of all the challenges and the fact that the end results did not look as planned.

A Never-Ending Process of Mastering Media Production

Sophia's hesitation to use media production was mainly based on the challenges that it brought to the instruction. She was using Twitter and knew how to use computers and tablets proficiently, so it was more a matter of perseverance with these challenges. Isabella explained that her strategy was using a sense of humor and troubleshooting by herself:

You need to show kids the reality of what could happen and what really does happen if you come to roadblocks using technology but also show them that you can persevere through it and it's okay—it's not a big deal; you can laugh about it. (Isabella, second interview with Sophia, 05.27.2015)

Like any other lesson without technology, the co-teachers used a set up that was based on stations. They either grouped up or paired up students to enhance their collaboration, they modeled how to address challenges by working together. Sophia described how they accomplished troubleshooting:

Isabella doesn't steer from anything. And that's why I don't steer away from anything. But I would be that teacher to be like, "I am NOT doing that." Because (a) I don't get it well enough to do it myself, (b) what happens if

something goes wrong and I cannot fix it. But working with Isabella—dive right to it—that's it. (Sophia, second interview with Isabella, 05.27.2015)

This is why they were making sure to have an environment that was as un-distracting as possible to help the students focus on their work in the middle of the messy engagement of the production.

A systematic structure and procedure for media production processes was helpful to reduce the anxiety level of the participating teachers. I observed a planning session where George, Isabella, and Sophia worked together to plan a project, and in this meeting, Isabella described the stages of work children had completed during pre-production. Isabella and Sophia provided a coherent set of linear stages to undergo to complete the production. After each guideline, students got permission to move to the next stage. Once the book analysis was done, either teacher saw the page-by-page analysis, and students could go to write the script. After writing the script, students drew or found images to match the script. Once approved, students went to the library to work with George on the recording and editing. When all the videos were ready, they reviewed and provided feedback. Isabella explained that it was a procedural process of stages, and Sophia added that their highly structured lesson plans were organized that way to meet their diverse students' need (Isabella and Sophia, second interview, 05.27.2015).

The process of gaining knowledge about media production is a never-ending task, yet both Isabella and Sophia saw themselves on a continual learning curve. Isabella explained that last year, in 2014 they were struggling to differentiate between a Public Service Announcement (PSA) and a commercial. They had to research and

learn the terminology by themselves. This shows that both of them understood that while it is a Sisyphean process where they were not reaching the highest level of competence, they aimed towards it. Because of their background, Isabella as special educator and Sophia as a reading specialist, they understood that their own modeling and tenacity to cope with their own trepidation had a positive effect on their students.

Trepidation of Mastering Media Production in the Classroom

Isabella and Sophia's strategy as co-teachers to cope with challenges to implement media production in their classroom was based on Isabella's perseverance to overcome technical challenges. "I think the biggest resource is somebody else that I have access to that who knows or isn't afraid to use the technology...because I know I have to be talked into it" (Sophia, first individual interview, 03.20.2015). Nevertheless, this did not mean that Isabella did not have her own fears and frustrations, as she explained:

One of the greatest disappointments is when you have something all set up to go. And all of a sudden it's a technology fail, which is a learning experience, and what happens here is a lot of failure and technology, but sometimes that's what drives you to change or make it better. (Isabella, first individual interview, 03.24.2015)

While observing in their classroom, I could see that both had developed coping strategies with an iPad that did not work, work that did not save, laptops that froze, and other glitches in software. Whoever was near the student calmly tried to receive a full description of what happened and offered different ways to address it, such as

using another device, writing down what was not saved, doing it again faster, and using different tools to do the same assignment. But the observed calm attitude might have been deceiving. Sophia described to me how each time that there was a technical fail, she was stressing, while Isabella addressed it right away. Sophia valued Isabella's perseverance to deal with these technical issues and admitted that she was learning. In addition, when they had the idea to do a scavenger hunt for the State House visit, Isabella created a Prezi, and Sophia commented about the content and learned how to make a Prezi. Whereas Isabella learned from Sophia's input about CCSS and pedagogy, Sophia learned to step out of her comfort zone and try technology. When I asked her how Isabella helped her to step out of her comfort zone, Sophia replied:

Because Isabella is trustworthy in that respect she does so much research figuring out all these tools out. And she used it so many times with her kids on her iPad. She is very comfortable with technology, digital literacy. (Sophia, second interview with Isabella, 05.27.2015)

Challenges to the Practice of Media Production

The main concern that was mentioned by Isabella and Sophia was technical failure. In several cases they were the ones to troubleshoot in order to save time and move on with a malfunctioning computer or iPad. As I observed in one lesson, a simple task, going on YouTube and finding relevant videos could not be done because Adobe Flash was not updated and the only person with the password to update it on each computer was unavailable. In that case, Isabella and Sophia modeled on the Promethean board with their computer and moved on.

Other challenges that they were faced with were time, modeling, differentiated instruction, and messy engagement. Scheduling did not allow them to have media production activities frequently because computers were taken for testing or the rigid curriculum in math had no time for other activities than the ones they were required to do. It also included time for PD to learn more and explore more. Though they took part in the Catalyst Teachers meetings with Dr. Hobbs and they had PD days with the math and literacy coach, they felt they could have benefitted from more.

Modeling media production in front of the class is showcasing how to navigate and do the assignment as well as how to cope with unexpected glitches. While observing their teaching, I documented how the application collapsed, the browser froze, the audio was not working, and many other technical issues. As they stood in front of the class and experienced these challenges, they modeled how to cope with them. Isabella had one strategy:

Perseverance. You have to have perseverance. You can't just say 'it didn't work. I am not going to do that again.' It did not work. What can I do to make the changes? What can I do differently? Who can I ask? Where can I get help? Things like that. (Isabella, focus group, 05.28.2015)

In order to accommodate every exceptional and typical student's needs and their various levels, Isabella and Sophia used differentiated instruction in their teaching. But when it comes to media production, the complexity of the process demands that they connect with each student. Because there are many roles in production and each group has diverse needs, the teacher must personally mediate between the social interactions. The director of one group was leading the script

writing very dominantly while in another group the director and the editor argued about an idea of how to film. In both cases, there was a need for intervention to allow others to participate as well. Managing the interactions in five groups simultaneously is highly demanding, even for two co-teachers.

Furthermore, having a messy engagement in an inclusive classroom is even more challenging than the usual disorder that media production creates. Though the activity may be well prepared, it always moved away and morphed into something different. Isabella and Sophia reflected on the process during the focus group:

Isabella: We have the skull and bones of “here is your framework, here is your script, here is your folder, here is your book, here is your image” and we talked about putting it all together. But it is sometimes different when they go off and they actually produce it. Part of it is we invested so much time and so much work into it that you want it to be fabulous...but then there are some times that we look at it and we are like....

Sophia: I mean, the purpose behind it for me is you are putting together a trailer to represent this book.... It wasn't just “go ahead and create something.” It was “Here's the book. Here are the parameters, now go ahead and do it.” That part I am fine with. But the part about if it tells me nothing about the book, then it is not going to be shown. (Isabella and Sophia, focus group, 05.28.2015)

Sophia had an ambivalent experience being flexible and at the same time having trepidation. However, Sophia's experience in the last year was positive, and with

Isabella's support, she felt reassured to hand the lead for the media production to the students:

So if somebody else wanted to do what I'm doing, I would suggest getting help from people, adults who know what they're doing, but really letting the kids just mess around with it. Although that scared me as a teacher, you know, it does really work. (Sophia, first individual interview, 03.20.2015)

Because Isabella and Sophia's collaboration was so strong, they felt comfortable talking about it opening. Having such an effective teamwork, allowed them to openly voice their differences of opinion. Their personal and professional bond was robust; they didn't have to be protective or feel fear because they had trust and respect. Their relatedness is what allowed each other to feel autonomous while collaborating on mastering media production.

Autonomy: Balancing Creative Playfulness with Academic Standards

Both Isabella and Sophia were able to explore the use of media production with their inclusive class as they implemented a new, highly structured math curriculum, going through the new online partnership for assessment of readiness for college and careers (PARCC) for the CCSS and the state testing for almost two months. Isabella had a strong motivation to use technology and media production to advance her students' skills. At the same time, Sophia wanted to develop her students' literacy skills along with social and emotional skills. Therefore, she was more cautious to integrate media production. Gradually, Isabella was able to persuade Sophia of the benefits as both started to play with the possibilities that media

production offered to them as teachers and to their students. Sophia described her collaboration with Isabella:

I have a different situation than other teachers. Because I have a co-teacher with me even though Isabella is a special educator, we consider ourselves as co-teachers...but when you are alone with all those kids, because there are times that I am alone, I cannot imagine myself videotaping one whole lesson while all these other kids are doing what they are doing because everybody needs help (Sophia, focus group, 05.28.2015)

What is more, their relationship went beyond a regular co-teaching partnership. Both shared their playfulness as a motivator for their students. With Isabella's passion for social networks and media production and Sophia's acting talent, they started to work on their YouTube series they called Teacher Talk. Using their own creativity, Isabella and Sophia wanted to engage the students in academic activity. They made short videos that would either motivate students by highlighting a point or creating suspense for a follow-up activity in class. For example, they created a video before the PARCC tests to tell their students that they were talented and they should not to be anxious. Like the video for the PD day, it ended with the teachers dancing in their chairs. Another video was preparing the students for an activity they were about to do in class: a scavenger hunt using Prezi. For that activity, the video was like a teaser to make them excited about the work that would involve a trip to the State House.

The impact of the playful video extended beyond motivation. The initial idea was to engage their students in an activity. Nevertheless, the teachers' acting as goofy characters gave permission to their students to imitate their playfulness in their own

work. The YouTube series cultivated a production-viewing culture where the end results were fun and engaging videos that were easy to make. Even more important, the effects of the teacher-made videos were seen in the student-made videos. Teacher Talk allowed the students to see that media production is also for adults and does not have to be perfect. The humor, the music, and the lively characters emphasized the importance of the message over a highly polished professional video. This idea was crucial in order to give permission to the students to play with media production and learn that the message is the most important part, as can be seen in Figure 5.11, which shows comments left by students on the YouTube page. It's clear that the students loved the video. Four students left comments, two liked the video, and in total the video was viewed 141 times, which means that it is likely that some students watched it at home again and again.

Teacher Talk: A Dedication to an Amazing Class!

Isabella

✓ Subscribed

15

141 views

+

 Add to

↔

 Share

 More

👍

 2

👎

 0

Published on Jun 17, 2015

Top 10 reasons why our class is AMAZING!!!!!!

Music "Best Day Of My Life" by American Authors (••)

SHOW MORE

ALL COMMENTS (6)

Add a public comment...

Top comments ▾

Isabella

3 months ago

Hi Ava! We loved our class and loved teaching each of you! I hope to see u this summer! Love, [Isabella](#)

Reply

👍

👎

Isabella

3 months ago

Hi Savannah! We loved being your teachers this year! Have an awesome summer and remember.. Kindness matters!

Reply

👍

👎

Isabella

3 months ago

Hi boys! Thanks for watching our video! We miss you!!!

Reply

👍

👎

Sarah

3 months ago

hi [Mrs. Isabella](#) thank you soooooooooo much for being my teacher this year and tell [Mrs. Sophia](#) i said thank you to her too!!!!!! p.s this is Savannah <3

Reply

👍

👎

AVA

3 months ago

This made me cry I can't believe this day is over I really REALLY LOVED THIS CLASS!!😭😭😭

I SAW MRS HASSLE AT STOP AND SHOP

LOVE YOU!!

AVA mahow! (Meow.....)

Reply

👍

👎

Alex

3 months ago

Hi mrs festa this is alex and michael

Reply

👍

👎

Figure 5.11. Comments on the Last Teacher Talk Video for the Last Day of Class. June 17th, 2015.

The idea for the YouTube videos evolved as Isabella and Sophia took part in the Catalyst Teachers group. Isabella joined the book club and the Catalyst Teachers group to advance her own practice, which was already ahead of most of the groups' members. Sophia joined these groups to challenge herself. She wanted to learn why and how to use the new technologies for her classes.

As I documented the Catalyst Teacher sessions with Dr. Hobbs, I observed Isabella showcasing her work and learning to use new tools such as Animoto and Videolicious. The fact that in thirty minutes she was able to produce a short funny video was a liberating experience that later on evolved into her YouTube series. Although Isabella was already on Twitter, she became more active as the group started to get on Twitter and have conversations online. Isabella mentioned that taking my monthly workshops and participating in the Catalyst Teachers' group was powerful. When I asked her to give an example, she explained:

Videolicious that Dr. Hobbs did and she showed us the video from the website and how it worked in another school, and then having us try it out and create something, then come back and share it. I took a lot from that, and then the kids started using Videolicious, cause I've never heard of that app before.

(Isabella, third interview with Sophia, 06.18.2015)

The out-of-school professional development with the university partnership gave Isabella and Sophia permission to be playful as they enhanced their students' learning.

Permission to Play: Balancing Structure and Freedom

Isabella had the intrinsic motivation to try and explore how technology could play a role in her students' life. Sophia, on the other hand, had to be waived in, not only by Isabella but by others such as administration and the out of school PD. In her first interview, Sophia explained:

I like being with a group because then I can practice what they are doing on my own time. Administration does give us PD, but unfortunately we have not had enough of it. But what we do get are people like the media library specialist and the literacy coach who put time in the mornings like from 8-9 a.m. and give us time to learn that way and always offer to come into the classroom and help us. So I take advantage of that. (Sophia, first individual interview, 03.20.2015)

Though administration integrated rigid curriculum according to the district and superintendent's decision and had standardized tests, there was great openness to implement media production. The community of practice, as Sophia mentioned, celebrated these activities during the PD days, the DigiPlayground time in the morning, during faculty meetings, and on Twitter (see Figure 5.12.).

Figure 5.12. The Reading Specialist Congratulates Isabella on Her Analysis. March 24th, 2015.

Each one of the co-teachers had a different strategy to explore how media production advanced their students' learning. Isabella liked to be inspired by discussion, to brainstorm, and then to do trial and error in her class. As Isabella reflected on her learning within a group, she explained that the reciprocal process of

coming up with ideas and then brainstorming together using examples was the most efficient for her. She elaborated:

Within that group we all explored Videolicious. And we all did ten different things. And I was: “This is so cool to see how ideas from ten different people.” And I am thinking of how I can do it in my own classroom. (Isabella, focus group, 05.28.2015)

Once the SAMR (substitution, augmentation, modification, and redefinition) model (Puentedura, 2010) was introduced, the main concern of both Isabella and Sophia was: does the media production activity enhance the students’ learning? Isabella used brainstorming and trial and error while Sophia used research and curriculum guidelines. Sophia explained her reasoning:

The other roles recently for me is looking at the lesson plan and trying to decide, “does technology fit into this?” or am I just trying to use that because I’m not so sure about technology and I want to use it? So this is still a struggle for me. (Sophia, first individual interview, 03.20.2015)

As Sophia worked with Isabella and explored the possibilities that media production opened to the students, she felt reassured to get out of her comfort zone. She explained:

So you have to give up all the fear, so I have to stop saying I am a technological illiterate because that's not helping anybody, including me. I just keep searching for things and trying things out. (Sophia, first individual interview, 03.20.2015)

As part of that process, Isabella and Sophia developed a mutual practice that incorporated media production while exploring their students' needs as they allowed the students to take the lead. As seen in Figure 5.13. Sophia shared on her Twitter a photo of her students working collaboratively and leading the learning process of electrical circuits. From Isabella's perspective, she added:

Because of my personal trial-and-error, off-the-cuff approach...I like to figure out what the students' strengths and needs are and what motivates them and what their passions are. So I try to incorporate into media production and also checking with the kids. I personally feel like it should be driven by them. Because if they're not driven by it, it's just me telling them what to do and what they're going to get out of it.... You want them to take ownership of it. That is what it is all about, that is where they get meaning from. (Isabella, first individual interview, 03.24.2015)

Figure 5.13. Sophia's Tweet About Students' Collaborative Work in Science. May 18th, 2015.

Sophia was also learner-centered and provided her own perspective. She explained to me that Isabella's approach was to give the students confidence and promote their agency. Unlike Isabella, Sophia explained that she liked to provide guidelines that promoted the students' explorations:

When you give an open-ended project without any parameters, you will get the bare minimum from the kids. So we guided them through what they had to answer. And that took them a while. It kept them more independent. We were kind of walking around checking making sure that they were focused and the behaviors that you find are so much lessened this way. (Sophia, second interview with Isabella, 05.27.2015)

Isabella and Sophia would provide the guidelines and the essential materials and let the students explore by themselves while the co-teachers walked around the room and provided support or feedback. When they did the online State House scavenger hunt, Isabella and Sophia created a YouTube video as one episode of their YouTube channel series Teachers' Talk to get the students excited about the activity. Then they introduced it to the students and provided a Prezi presentation that would be their scavenger hunt guideline to create a brochure for the State House. As the students worked in pairs to produce the brochure, Isabella and Sophia supported their online search for information about the architecture of the house, its use, and the names of state officials. In addition, they gave feedback about students' brochure designs. The students were independent to explore and design, but their production was structured with guidelines and an evaluation rubric that was known and given in the beginning. Isabella shared with me the photograph shown in Figure 5.14, which displays a photo

she took during the field trip. When the students visited the State House a week later, they already knew a lot about it and were praised by the house official for their remarkable brochures.

Figure 5.14. Students' Work Display at the Visit to the State House. June 17th, 2015.

In science, English Language arts, and social science, Isabella and Sophia had many opportunities to explore how media production promoted their students' learning. The highly structured math curriculum did not allow them to play with media production. Nevertheless, during a math intervention, Isabella, inspired by Grace, the math coach, and Abbie, the behavior specialist, was able to do a screencast activity to showcase how to solve a math problem. These kinds of experiences during the year with the support and mainly their own collaboration advanced Isabella and Sophia's own teaching as well as their students' experiential learning using media production.

Becoming Digital Literacy Mentors

Isabella and Sophia learned to work together with great trust and respect that enabled them to explore new pedagogies using media production. Table 5.4 and Figure 5.15 showcase the process of Isabella and Sophia from having a strong relatedness, to explore their mastery of media production and having a sense of autonomy in their class. Both co-teachers had a strong sense of relatedness by having shared goals. Both complemented each other by being Spirit Guides and Demystifiers whereas Isabella was more a Techie, with a higher empower score and Sophia was more of a motivator with a higher protect score. Together they were learner-centered teachers who used technology and innovative tools to clarify system constructs. Having these shared goals enhanced their collaboration. Their collaboration was based on trust between each other and between their students. Isabella explained, “Trusting in the kids, trusting in your teaching, that your expectations are clear to them and that they can kind of initiate and work on their own and help each other and not necessarily be teacher-directed all the time” (Isabella, third interview with Sophia, 06.18.2015)

As they learned to master media production, these teachers used it in various ways for different subject matters. Their Book Trailers encompassed all five digital and media literacy competencies. They planned ahead and had the students go through a structured linear process with coherent guidelines. As students produced their media, Isabella and Sophia knew that it always looked different than what they planned. They persevered through the different trepidations of technical issues, time, modeling, differentiated instruction, and messy engagement.

In order to feel autonomous, they reassured each other to explore and trust their students to overcome the many challenges. The encouragement of their peers and their coherent structure allowed both them and their students to play while they enhanced their learning. The out-of-school partnership with the university inspired them to push even more towards a playful approach to incorporate media production as an effective way of teaching. As educators, both Isabella and Sophia used Twitter and YouTube as their agency to explore and share their work. They explored their ideas by producing and uploading short episodes of their Teacher Talk series. Many times, Isabella tweeted an idea during a Twitter chat and received immediate feedback from her followers on the social network. For Sophia it was harder, but she learned to explore media production while her students led. In our last interview, Sophia explained what feeling autonomous meant for her:

Let it go for me means let it go that I'm not as good at all these different technological teaching tools and that one or two of them is ok. If you can help a lesson be enhanced with only knowing one or two things and then taking some ideas from the kids that they know how to do. You don't always have to be the one in charge or be a perfectionist at that scale, cause I'm not. So I have to let that go. (Sofia, third interview with Isabella, 06.18.2015)

Sophia's reflection showcased how she transitioned from being a traditional teacher to a digital literacy mentor. She gave more control to her students and saw herself as a guide or facilitator rather than the center of knowledge that instructed the students. Sophia's insight and professional experience were the ones to allow Isabella to

become a digital literacy mentor. Isabella did not only play with the tools but also used them meaningfully to promote her students' learning.

Table 5.4.

Isabella and Sophia as Self-Determined Digital Literacy Mentors

Relatedness	Motivations	Spirit-Guide, Demystifier, Motivator, Techie	
	Shared Goals Collaboration	Learner-centered Co-teachers	
Mastery	Competence	Access	Book/Computer
		Analyze	The book/videos
		Create	Trailers videos
		Reflect	Peer feedback
		Act	Showcase to 1 st grade
	Process	Planning, providing structured guidelines	
	Trepidation	Technical problems, time, modeling, differentiated instruction, and messy engagement	
Autonomy	Reassurance	Co-teachers, university partners, CoP	
	Structure	Rubric, pre, production, post	
	Exploration	Student-led activities, YouTube channel

Figure 5.15. Isabella and Sophia’s Self-Determination Model

Chapter Summary

As the only co-teachers in the school, Isabella and Sophia had a chance to use deep collaboration to experiment with how to integrate media production in a meaningful way for their students. They connected the activity to the CCSS and were able to evaluate how their students enhanced their learning as a result of making media in math, science, English language arts, and social science. For George, they are both “providing ownership and a voice for what they (the students) are doing. And by having that, they're hopefully keeping it and being equipped to go forth and always have that voice” (George, focus group, 05.28.2015). Although Sophia did not see herself as a techie person, she was familiar with using Mac and PC, and she used social networks as well as smartphones and tablets. She was a learner-centered

teacher and as such, she cooperated with Isabella's experiments of media production since their mutual goal was to enhance the learner-centered pedagogy and differentiated instruction in their class.

Their case study demonstrated how mutual understanding, trust, and respect can help each other integrate media production successfully. At the same time, Isabella learned from Sophia's work on systematic structured lesson plans and how to incorporate the CCSS. Both were playful educators who used their sense of humor to motivate their students. Their balanced pedagogy between structure and play allowed them and their students to benefit from media production.

Chapter 6

Playing with Media Production

At the beginning of my research journey, I introduced my research process and asked for volunteers from the entire staff of 45 full-time educators after an Ocean Elementary faculty meeting. At the end of the meeting, I reviewed the consent forms, but I could not see the name of Charlotte or Rachel. I was surprised. Charlotte, the literacy coach, was the acknowledged leader of the digital literacy initiative, and Rachel was the most advanced teacher in implementing media production in her teaching. I knew that Charlotte and Rachel were close and had been working together for eight years. Since Charlotte and I shared a room, along with Grace, the math coach, I decided to ask her about it.

Charlotte was quite modest in describing her work. She said that she did not feel as if she had anything to contribute to the research since she was not a classroom teacher but just the literacy coach. However, she thought that Rachel would be the perfect teacher to demonstrate her practice. After explaining that I was interested in showcasing how Rachel's practice evolved thanks to Charlotte's guidance, Charlotte had a suggestion. Charlotte came with me to Rachel's room and suggested that they both sign up for the research in order to share with other people the remarkable work that Rachel did and was doing in her 2nd-grade class. Rachel was saying that she did not feel she was doing anything special and that she had limited time to devote to the research. At that time, I remember wondering about this strange exchange; at the time, I did not know if she truly believed that she was not doing anything special or if she did not want to take part in the research. Nevertheless, Rachel agreed to take part

in the research when Charlotte suggested that they both do it together and after I reassured her of the limited time commitment.

Though it seemed in the beginning that Rachel was not highly engaged or even interested in the research, she was the first teacher to invite me to her classroom. Rachel seemed happy to share with me her insights and practices, and we would talk about her work during the research. When I asked her at the last interview why eventually she volunteered to be part of the research, she answered, “Why not? I guess I don’t really have a reason.... I guess because I was doing it. I wanted other people to know that it was doable” (Rachel, third interview with, Charlotte 06.15.2015).

Rachel was eager to share her many creative instructional practices with people outside the Ocean Elementary School community. More than other teachers, she was an outward-facing educator. During the observations and interview, Rachel was very open and shared her perspective and challenges. At the same time, she did not participate in the focus group and did not reply to my email, where I shared the first draft of the findings chapter for additional member-checking. However, I was not the only one who experienced Rachel’s ambivalent message of her engagement. As I observed her during the professional development (PD) days and Catalyst Teachers’ sessions, I saw that her hesitant engagement was part of her interactions as she shared with others her noteworthy practice but also felt that her time was valuable and that she would like to spend it in a suitable professional development setting with someone like Charlotte.

Introducing Rachel, A Grade 2 Teacher

Since 2013, Rachel taught 2nd grade at Ocean Elementary. She was a lifelong local resident of this small seaside community; she had attended Ocean Elementary as a young child and later on earned a B.A. in elementary education with a certificate in special education. Furthermore, her experience in high school with project-based learning formed her passion to engage her students in authentic inquiries toward a final product that could be shared. In order to have her students go through that experience in her class, Rachel spent a vast amount of time at home researching and preparing her classes. She loved to find the best tool that would fit her idea of a lesson, enhance her students' learning, and be aligned with the Common Core State Standards (CCSS). Rachel implemented media production as she received support and experienced the noble struggle to improve her practice in her classroom. Rachel's journey as a highly driven teacher who was exploring media production offers insight into how some teachers have learned how to master the medium in an elementary public school.

Rachel met with the literacy coach, Charlotte, weekly to work on instructional strategies using digital literacy as aligned with the CCSS. They met on a regular basis as part of Rachel's own professional development. Rachel and Charlotte established their professional development relationship since both came to the school since 2008. Since then, Rachel taught in different grade levels, and Charlotte was always there to support her. Rachel was amenable to coaching and collaboration, and she received support from other specialists. Grace, the math coach, came into Rachel's classroom and tried different ways of using media production with her students. Abbie, the

behavior specialist, came several times a week to work with a student with emotional and behavior disorders. She also had many parent volunteers and had an occasional teacher's assistant come in now and then. The significant support Rachel received allowed her to explore and implement media production in different ways with her students. In addition, Rachel joined the Catalyst Teachers' group and participated in extended professional development in digital literacy in order to implement and support whole-school integration. She presented to her peer teachers on the March 6th PD day and during the DigiPlayground morning sessions in December and January, 2015. Rachel kept two active Twitter accounts: one was personal and the other one was for her class to post students' artifacts and connect with the parents and the out-of-school community. Her personal Twitter account was used to share resources and connect with professionals to find new resources.

This chapter describes Rachel's efforts to implement media production as she received support mainly from Charlotte, the literacy coach, and other support team members. Rachel did not need to get out of her comfort zone to use media production. She was highly driven but needed the support to execute her ideas. First, I describe Rachel's motivation to use media production and relatedness with Charlotte as a reciprocal relationship that promoted their digital and media literacy practice. Second, I analyze one out of many projects that she used in her class involving creating public service announcement (PSA) about the importance of recycling and sustainability. Third, I will portray how the relationship with Charlotte promoted Rachel's sense of autonomy to apply media production in her pedagogy. Rachel's case study showcases how a 2nd-grade teacher can use the resources in school and out of school for their

students' benefit and their own professional development to become a digital literacy mentor.

Relatedness: How Coaching Connects Motivation and Practice

Rachel was a highly active user of digital media and technology. Table 6.1 shows her responses to the survey questions as compared to the entire faculty. She is above the average of Ocean Elementary faculty in using media in all but one question. While she used Internet every day in her classroom and the Promethean board for every class, she showed video only once a week. Her above-average use of video recording and media production on a weekly basis and her below average use of video screening demonstrates that she was interested in students' active production and not passive screen time.

Table 6.1.

Rachel's Self Reported Frequency of Using Technology on a Five-Point Likert Scale

	How often are you using media production in your classroom?	How often are you using the Promethean board in your class?	How often do you use Internet during your classes?	How often are you showing videos in your class?	How often are you using a video recording during your class?
Rachel	2	5	4	2	2
School	1.9	4.125	3.696969697	2.71875	1.212121212

Note. Survey taken on March 24th, 2015

Rachel made sure to share her work online with her class Twitter account so that her students could have an authentic audience and a greater impact, as will be

showcased throughout this chapter. Another form of outreach was through Skype. In the 2014-2015 school year, together with another 2nd grade class, Rachel's class Skyped with the author Jonathan Emmett from the UK. Figure 6.1 shows an exchange between Rachel and the author. She also hosted a cultural exchange with an elementary class in Ireland and with the chief executive officer (CEO) of a recycling company from Chile. For Rachel, media production was a tool to enhance student engagement and also “a way to break the walls of the school.... Now we can go out, we can Skype...we can teach a class in Ireland all about the town that we are living in” (Rachel, first individual interview, 03.24.2015).

Figure 6.1. Jonathan Emmett Replying to a Tweet About Rachel's class's Skype Session. November 27th, 2014.

Motivation: Focusing on The Empowerment Effect

Rachel's motivation was learner-centered both in October and in March. In October she was a Techie, Sprit Guide, and Motivator. In March, she was a Spirit Guide, Motivator, and Trendsetter. While her learner-centered motivation (Spirit Guide & Motivator) stayed stable, she shifted in these seven months from a tool-focus motivation (Techie) towards a text and audience focus (Trendsetter). There are

several potential explanations for this shift, such as her weekly work with media production during this year, her rising awareness of her influence through the use of Twitter, and of course the continuous job-embedded professional development with Charlotte and the four professional development meetings of the Catalyst Teacher group led by Dr. Hobbs. When I asked Rachel about her motivations, she answered:

I guess that is because I am trying and it is not easy to do. I am trying to help the children to figure out what they are interested in and help them kind of research stuff that interests them because I feel that if they are in it with their heart they really want to learn and they are more engaged. (Rachel, first individual interview, 03.24.2015)

Figure 6.2. Rachel's Digital Learning Profile Taken on October 1st, 2014 and March 24th, 2015

Another interesting change from October to March was her empower and protect scores. Empower increased from 72 to 78 while protect decreased from 74 to 72. While Rachel's fear of risk and challenges from media effects declined a little, her view of the opportunities and advantages of using media increased. Whereas in

October, after a year of experimenting with media production in her class made her protect and empower scores almost equal, seven month later, after an even deeper integration of media production, her empower score was higher than her protect score. According to Rachel:

I do not have my guard up as much about technology and using media in the classroom. I think the biggest thing that scares me about using media in the classroom is having the children stumble upon something they are not supposed to see. I think my empower score went up because they (the students) are super motivated to get their messages out. They want to tell the world what they learned. They want to teach people how to reuse items right now. (Rachel first individual interview 03.24.2015)

Rachel was geared up and ready to reach higher levels of practice with media production when the digital literacy initiative started. But she wanted to connect it to the CCSS and make sure that these activities, as engaging and fun they are, would be connected to educational goals. Throughout the year, Rachel had Charlotte, the literacy coach, share and develop ideas for media production.

Shared Goals: Charlotte's Support Changed Rachel's Motivation

Rachel also took part in the book club that originated with the digital literacy initiative at Ocean Elementary and then with the Catalyst Teachers group. She offered sessions in several opportunities, such as the DigiPlayground and the March 6th PD day. For Rachel it was more about sharing her knowledge rather than learning new tools. When I asked her why she joined the group, she explained:

In the study group, I learned mostly from my peers. But then also, I felt like it was my job to help other people in the building become comfortable with it.

Like through the DigiPlayground or my kids went into a first grade classroom and taught them how to use Popplet. (Rachel, third interview with Charlotte, 06.15.2015)

Nevertheless, she did learn about new concepts and tools such as Shadow Puppet, as her tweet showed. Figure 6.3 shows a Twitter conversation between Rachel and the educational tech company, Shadow Puppet. Even though she already had an account from July 2014, it was after starting the Catalyst Teacher group that Rachel started to more actively use Twitter. She created two Twitter accounts, a personal one where she shared thoughts and connected with people online. The second one, for her class, was created in November 2014 to share her students' work. It allowed her to strengthen her professional relationships in and out of school as shown in Figure 6.3, where she thanks Dr. Hobbs for introducing Shadow Puppet; Isabella commented and even Shadow Puppet twitter account commented.

Figure 6.3. Tweet Thanking Dr. Hobbs for Introducing Shadow Puppet. January 30th, 2015.

School leaders recognized Rachel’s leadership in digital literacy. To honor and acknowledge her student-driven work, Rachel was asked to come with two students to showcase their work on recycling in front of the school committee in the Town Hall. Figure 6.4 shows a photograph from the presentation.

Rachel was receptive to exploring new instructional practices with digital media and technology. As a member of Ocean Elementary's community of practice, Grace, the math coach, asked Rachel to come to her class to experiment with Explain Everything.

I know that she (Rachel) was trying to integrate in the area of literacy, and I asked her, "Can we try a few things out in math?" cause I knew that she was very comfortable with the technology, and she said, "Sure, come on in." Extra set of hand is also helpful when you trying to run a math workshop and incorporate a new tool that students haven't been exposed to. (Grace, focus group, 05.26.2015)

Figure 6.4. Rachel Talking to the School Committee in Town Hall. May 20th, 2015

Job-Embedded Professional Development as Collaboration

Rachel valued the insights she gleaned from Charlotte, as seen in her interviews and tweets. Charlotte and Rachel both started to work at Ocean Elementary in 2007. Besides becoming friends outside of school, Charlotte has been coaching Rachel on how to implement her ideas into the curriculum for each grade that she taught (kindergarten, 1st, 3rd, 6th, and 7th), and since 2013 as a 2nd grade

teacher. Rachel said, “She (Charlotte) always helped me to learn the curriculum and integrate them for the year” (Rachel, third interview with Charlotte, 06.15.2015). In the summer of 2014, Rachel bought a book about project-based learning and worked with Charlotte to design lesson plans that would incorporate project-based learning, technology, and the curriculum requirement. In her last interview, Charlotte said, “The ones who are most successful would have been successful with or without coaches.” But immediately, Rachel stated, “I do not know if I agree with that...” (Charlotte and Rachel, third interview, 06.15.2015). As I observed them working together, Rachel and Charlotte developed many lesson plans integrating media production as part of their professional relationship. Figure 6.5 shows how Rachel used Twitter to demonstrate her gratefulness for their relationship. Charlotte explained to me how their work together started:

As a coach, I typically have a weekly planning time with new teachers. So when we first started, Rachel was new to 2nd grade. She wasn't new to teaching, but I can also take teachers that are new to a grade and plug in a weekly planning time. Now, when teachers get comfortable in that grade, I will say to them, “Do you want to plan with me weekly anymore? Do you want to just yell if you need something?” and Rachel had always been, “No, let's keep our planning.” (Charlotte, second individual interview, 05.19.2015)

Rachel and Charlotte collaborated many times in 2014-2015, but their biggest success was a special unit on recycling.

Figure 6.5. Rachel Tweeting an Acknowledgment of Charlotte’s Mentoring. August 8th, 2015.

When Rachel became a 2nd-grade teacher and wanted to have a project-based learning unit that was connected to her passion about recycling, Charlotte offered the idea of having the students make a PSA. Rachel described her process of understanding the educational goal of doing a PSA as suggested by Charlotte:

I had a hard time to understand last year when she introduce.... Why am I going to do that? Why are they going to make PSA? But the more I thought about it and the more I thought about not only helping children being successful academically but also be successful citizens who are going to make a difference in the world. (Rachel, third interview with Charlotte, 06.15.2015)

Once introduced to the idea of making PSAs as a way to incorporate curriculum requirements, project-based learning, and recycling, Rachel looked for ways to have

the students create a media production. She especially loved the idea that the students would have an authentic learning experience and share their research with the out-of-school community using social networks. After talking to Charlotte, Rachel saw the benefit of having an end goal that was beyond an assignment in class that the teacher told the students to do and be a more engaging project that connected the community.

Charlotte reflected on Rachel's research and experiments with PSAs as she progressed since 2013:

Last year, the kids used Haikudeck and it was fine. Haikudeck is like a very visual slide show. It is mostly an image and you have room for like two or three words. What I loved about it and why Rachel chose it as a tool is it forces the kids to use precise vocabulary. Which is huge. 2nd graders often use vocabulary that is very general or they will use the word "stuff." You know—the stuff. And we're trying to teach them that you are more effective as a writer or media producer when you are using vocabulary that is more precise. So she picked a good tool. They did a good job. This year, they used Shadow Puppet. So it allowed them to use their voice. It blew me away. Like I thought last year was good...Rachel as a teacher took what she learned from last year that it's as important to have a strong image to have precise vocabulary and then she added their voice. It was huge. (Charlotte, second individual interview, 05.19.2015)

Rachel became more proficient in looking for tools and applying them with her students. Her students had a deeper experience of research, production, and agency.

Moreover, Charlotte learned how her ideas for a unit could be done effectively using media production.

Rachel and Charlotte's coach-teacher relationship was reciprocal. While Rachel was coached and supported with activities and units that were connected to the curriculum, Charlotte benefited from seeing how her suggestions came to life in the classroom and were modified with Rachel's creativity. "As far as the role of a coach, I really just see it more as someone who can organize things for people and a member of the group. Not so much like a reason why things happen" (Charlotte, third interview, 06.15.2015). Charlotte saw her professional growth as she worked with Rachel. Furthermore, in October 2015, together with Charlotte, they presented their student-driven pedagogy in a statewide educational conference.

Collaboration with Students

Rachel's community of practice consisted of her colleagues—mainly Charlotte, the literacy coach; her peers, the 2nd grade teachers; and the Catalyst Teachers—but also her own students. While observing her use of media production, many students came and showed her a new feature. Rachel's students would be the go-to people when there was a glitch. Rachel acknowledged that as much as she taught her students, they taught her as well. She said, "I have kids every time I show them something – "Well, I just got this on my iPad at home, and did you know that you can add music to Shadow Puppet?" (Rachel, third interview with Charlotte, 06.15.2015).

On April 7th, 2015, Isabella and Sophia's students came into Rachel's class and read stories. The community of practice between the three Catalyst Teachers

expended to their students. The 4th graders were teaching the 2nd graders. Facilitating peer learning was another way to incorporate a collaborative approach driven by students. The mutual respect, acknowledgment, and gratitude were seen in Rachel's tweet thanking Isabella and Sophia (see Figure 6.6.).

Figure 6.6. Rachel Thanks Isabella and Sophia's Students for Visiting Her Class.
April 7th, 2015.

Unmet Needs of the Advanced Practitioner

Ocean Elementary School's community of practice also had its own limitations. Charlotte believed that the local community and professional development program did not fully meet the needs of advanced practitioners like herself and Rachel. She explained in our last interview that "real professional development needs to meet you where you are.... She (Rachel) knows what she needs. She knows where it is. She needs to be able to go there" (Charlotte, third interview with Rachel, 06.15.2015). Compared to other teachers at Ocean Elementary, Rachel is very advanced in her implementation of media production and

technology. According to Charlotte, her professional development can be met only outside of school. Rachel agreed with Charlotte and elaborated:

I got invited to the Google Jamboree of educators in Boston. And there are other people out there who are elementary teachers who are doing the same type of things I am, you know? And there is the other 2nd-grade teacher down the hall, but there is not a lot of us, but there are a few of us out there, and that is why they have these things: for people to get together. (Rachel, third interview with Charlotte, 06.15.2015)

While visiting the Google Jamboree in Cambridge, MA, on February 27, 2015, Rachel found many workshops around the country for her level, but the funding from the district was too low to support her traveling to all these workshops. And yet she was able to continue and research online and use her in- and out-of-school resources to enhance her relatedness, which grew her mastery of media production.

Mastery: How Media Production Connects to Education Standards

Rachel made considerable use of media production activities, which varied in format and tools. Table 6.2 shows a list of the activities she developed during the Spring 2015 semester. Rachel's students used media production to take pictures, create a collage as a book analysis, solve a math problem collectively with screencast, create month-long video projects, code, and present on the special characteristics of insects. In English language arts, together with the literacy coach, Rachel's students created a digital poster using PicCollage on iPads to summarize a book they read. For problem solving in math, together with the math coach, Rachel's students created a screencast to solve an equation using Explain Everything on iPads. They Skyped with

different people around the world together with another 2nd-grade class down the hall. Figure 6.7 shows Rachel's students participating in the Hour of Code program, where they experienced coding. In learning science, her students analyzed the structure and behavior of different insects and created a superhero contest to learn about insects. In each media production activity, Rachel made sure to have the CCSS applied to the process of production. Each project-based learning had a clear educational goal and concrete outcomes that would later be shared on the class Twitter account with the parents and other interested people. As stated before, the recycling unit that Charlotte suggested and Rachel executed was the most advanced and deep in its modification of a traditional lesson plan.

Table 6.2.

Rachel's Various Uses of Media Production in Class

Project name	Subject	Format	Tool	Duration
Book Review	English	Poster	PicCollage	2 classes
April, 2015	language arts			
Problem Solving	Math	Presentation	Explain Everything	1 class
April, 2015				
Discussion with	English	Video	Skype	1 class
a Book Author	language	Conference		
November, 2015	arts			

Holidays in	Social	Video	Skype	1 class
Ireland	Science	Conference		

December, 2015

Coding	Enrichment	Code	Hour of Code	1 class
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December, 2015

Recycling Unit	Science	Video	Shadow Puppet	3 classes
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March, 2015

Figure 6.7. Rachel’s Tweet About the Hour of Code Practice in Her Class. December 16th, 2014.

Creating PSAs for Environmental Advocacy

Rachel used the application Shadow Puppet to have her students research and produce a PSA about reusing plastic materials. The previous year, she used a presentation application (Haikudeck), but after being introduced by Dr. Hobbs to Shadow Puppet, Rachel modified the unit to have more sophisticated features. Over the months of March and April 2015 the students researched the topic and produced seven videos about different ways to reuse plastic materials. While Haikudeck is an easy-to-use application on an iPad to create visual representation with pictures and titles, Shadow Puppet had one important addition, voice recording. This significant feature allowed the students to articulate their message visually and orally.

The activity had all five digital and media literacy competences from the ACRAA model. Table 6.3 offers an overview of the lesson .The students learned to access information using the computer, research reliable information, communicate via Skype with a CEO of a recycling company, and learn to produce a short video using Shadow Puppet on iPads. Students worked collaboratively in dyads or groups of three, and each group had an iPad to produce the video. They analyzed the information they gathered and planned their PSA by creating storyboards. They found pictures to represent their ideas and insert them into the application. They recorded themselves explaining the process and the idea of reusing. They reflected on their creation by providing peer feedback and by reading an article and answering questions individually. Finally, their work was shared online in order to advance reusing recyclable materials. The whole process had many components that were

required by the CCSS for 2nd grade, such as learning about procedural process, being able to verbalize ideas, providing evidence for claims, and collaborating on a project.

Table 6.3.

AACRA Model of Creating Recycling Videos in Rachel's Class

Competencies	Practice in Rachel's Classroom
Access	Using iPads and researching reliable information online
Analyze	Evaluating the online information and synthesizing into Padlet
Create	Producing a PSA using pictures, text, and voice over
Reflect	Peer review in class following a suggestions and a praise
Act	Sharing videos on Twitter, YouTube, and presentation to parents

Though the following section divides the activity into the five digital and media competencies, Rachel integrated them together and did not separate them. The students learned these competencies all together as a whole.

Access. Students learned to access different forms of information using different devices. They researched information on the Internet using the classroom desktop computers. Figure 6.8 shows how Rachel shared their work by posting an image to Twitter. Charlotte retweeted it while Isabella commented on it. The students Skyped in class with a recycling company chief executive officer (CEO) to talk about the subject. They searched for pictures to represent their ideas for reusing using iPads. The students had to learn to troubleshoot as they worked on researching or creating the PSAs. In observing students' work, Charlotte explained, "They have to wrestle

with how to make it work. So they are problem-solving, but they don't even know they are problem solving” (Charlotte, second individual interview, 05.19.2015).

Figure 6.8. Tweet About Students' Preparation for the Skype Talk.

Analyze. In one class, the students started to work on the topic of sustainability and recycling. The students went online to find information on the subject and be inspired by other PSAs that were made on recycling and reusing. One way to aggregate their findings was to use Padlet. Figure 6.9 shows how children consolidated the information they learned using Padlet, and Figure 6.10 shows how she tweeted about her work. As shown in the tweet, the students posted their answers to Rachel's question, "Where is the world's largest trash pile?" Rachel was so proud

of her class findings that she shared the Padlet and Dr. Hobbs replied to her on Twitter.

Figure 6.9. Using Padlet to Consolidate Students' Search Results. February 6th, 2015.

Figure 6.10. Rachel's Tweet About Her Class Padlet. February 6th, 2015.

Later that month, Rachel started to talk about reusing and introduced the idea of a PSA. In order to introduce the concept of a PSA, Rachel showed different PSAs on the class' Promethean board. In one of my observations, the students watched a video and answered Rachel's questions about the message, target audience, and techniques used. Then, Rachel showed them the PSA again without the sound and asked the same questions. After that, the students worked in groups to gather information for their own PSA, having the experience of searching for information online and with the understanding of what a PSA is. In her interview, Rachel explained her pedagogy:

When I teach them (students) something instead of me standing in front of them for an hour, I rather teach them something and then have them go figure it out.... If I show them a PSA about recycling and we talk about the strong images that are in there and why those images make you want to recycle, then to have them go look for images that make them want to reuse things, they are actually applying the skills that I taught them instead of me sitting in front of them. (Rachel, second individual interview, 05.15.2015)

Create. After having all the information they wanted, the students drew a storyboard and wrote their script. Figure 6.11 shows how students used their online research data to synthesize a coherent narrative in the format of a storyboard. The students wrote a description, lines of voiceover, and illustrated the picture they were going to use to demonstrate their claims. Then they searched for suitable pictures online or drew their own illustration. Once they gathered all the visual information, they used the iPad with Shadow Puppet to upload the images into the application.

They put all the pictures in order and then recorded their voice. The students recorded their voiceover following their script and the order of the images. They explained the problem and the different uses of recyclable materials. Together as dyads or group of three, they edited their voice if the result was not satisfactory and then saved it. Rachel used her class' YouTube account to upload the final video in order to show and reflect on them in class.

Figure 6.11. Tweet Showcasing the Students' Storyboard Process. March, 23rd, 2015

Reflect. As the students gathered around the Promethean board, Rachel was finishing uploading all the final videos to the class' YouTube channel. She introduced the procedure to give feedback for each PSA. As seen in Figure 6.12, the students sat on the classroom rug and watched the Promethean board featuring the class' YouTube channel. On the right side of the Promethean board, Rachel put two laminated sheets labeled "Share a grow" with a tree and "Share a glow" with a star. To the students, Rachel explained, "A glow is a compliment and a grow is something

they (the media producers) can do to make it stronger” (Rachel, during observations, 03.26.2015).

Figure 6.12. Class Giving Feedback to Each PSA. March 26th, 2015.

Another reflection was when Rachel went between the desks and provided feedback for each group. In Figure 6.13, we see Rachel was reviewing the final version of one group on the iPad while having the storyboard alongside. She provided them with feedback to see if the final version matched the plan and commented on the size of the titles, which were hard to read, and one voiceover that was hard to hear. It was sometimes challenging since there were so many technical issues with the iPads. As she explained to me in her interview, she was troubleshooting, providing feedback, and doing formative assessment at the same time:

I do try to circulate while I am working on technical issues. I try to go around and see what everybody's progress is. And for that particular activity, they made a storyboard, so I collected all their storyboards. The day after they made them, I went through them and made sure they were on the right track. While it is actually happening you can usually see just by looking: who is not collaborating well and who is having a hard time understanding what

the direction were, who needs to be retaught, who needs another mini-lesson on why we are doing it.... (Rachel, second individual interview, 05.15.2015)

Figure 6.13. Rachel and a Student Comparing the PSA to the Storyboard. March 26th, 2015.

Act. The final versions of all the PSAs were uploaded to YouTube and as a post on Twitter (see Figure 6.14.). In addition to having fun producing videos, the students learned an important issue about where they can make a difference and be socially responsible for our planet. They learned about reusing recycled materials and created a video to raise awareness that was posted online to share with their community. Rachel explained to me that her students loved this activity since it had an authentic audience and a meaningful goal:

They are sharing it with the world. It really breaks down the walls of the classroom because I can send all the stuff out to the parents on our Twitter page. Or they can watch it on their YouTube channel.... This isn't pen and paper work for the teacher. This is work for them to be meaningful citizens. (Rachel, second individual interview, 05.15.2015)

Figure 6.14. Tweets of the Class' PSA. April 14th, 2015.

What is more, one group created a website to have an even greater impact, as seen in Figure 6.15. The success of the project was so remarkable that Rachel was asked to come with two students and present the project-based learning to the school committee in the town hall, which demonstrated Rachel's statement that "It gives the children an authentic audience to share their work" (Rachel, first individual interview, 03.24.2015).

Figure 6.15. Website Created by Rachel’s Students to Call for Reusing.

Rachel’s Perception of her Students’ Benefits. Rachel’s students benefited from this activity in various ways. It allowed them to have experiential learning as they collaborated to problem-solve. They had a challenge and with an authentic audience they had to come up with a creative solution. For Rachel the benefit for her students was “just being able to use something and explore and figure out how to use it on your own and use it to create something” (Rachel, second individual interview, 05.15.2015). She explained how they learn to be flexible, creative, and thoughtful: “They get to create a storyboard, so they are finding strong images to go with things. And they are really analyzing other people's work first” (Rachel, second individual interview, 05.15.2015).

For 2nd graders, creating your own idea enhances the sense of ownership while developing concrete operational thinking. The ownership enhanced the engagement and collaboration because “they have ownership over it. They own whatever they make. And they know what the expectation is. It gives them the freedom to show me what they can do” (Rachel, second individual interview, 05.15.2015). Charlotte

described the students' work as authentic collaboration: "There's a real and purposeful collaboration and they see their results over time; they can see that they're getting better at it over the course of the year" (Charlotte, second individual interview, 05.19.2015). And with this effective engagement and collaboration, they can learn from each other and develop the concepts of concrete operational thinking. The students learned new words such as recycling, abstract concepts such as climate change, procedures to solve problem such as reusing, and how to produce a PSA. All of those benefits evolve as they work together and have an authentic audience.

Teacher's Benefits. For Rachel, integrating media production, such as the activity of PSA production, combined her passion for project-based learning and her savvy use of digital technology. She was able to work together with her students on a project and share it using different online platforms such as Twitter and YouTube. It allowed her to have agency in and out of school, showcasing what her students were doing. It advanced her leadership role by teaching other teachers how to effectively use technology in their class. In addition, she was recognized and asked to share it with the school committee in the town hall. As a teacher, the group work with tangible artifacts was a way to have a formative and summative assessment to better evaluate the learning of each student. And yet, even for a proficient teacher and a tech savvy person such as Rachel, it is not always easy.

Lifelong Learning: Mastering Media Production

Surprisingly, Rachel did not see herself as tech savvy. And yet, she did acknowledge that she was using the technology the best way she could under the circumstances. When I asked her what these circumstances were, she replied:

I would say the challenges, the technical challenges.... You were here when two of the iPads were dead and some of them didn't work. When you share them with the whole school, that's a challenge because you cannot save anything. You can save it to the iPad, but I do not get the iPad cart for another week.... I have to learn how to use it first. It is a challenge to kinda let go and let the children guide you too. Because a lot of the time after I introduce something, they're home downloading on their own iPad and then they are coming in telling me what we can do with it.... So it is really letting go of the control that is a challenge. (Rachel, second individual interview, 05.15.2015)

Rachel understood that it is not about being the most tech savvy person. It is not about being proficient and having the perfect solution. Mastering media production is about making it work under the reality of the classroom for the benefit of the students and the educational goals. Rachel mentioned several times that in every class she used technology, some things did not always work as planned. She came to accept it and even developed a pedagogical approach to her troubleshooting in class. She explained her coping strategy as modeling problem solving:

They see me stand up there and the computer won't work, or I go to show them an app and the app doesn't work, or you cannot save—you know, they see that. It's OK to make mistakes by learning so they are more comfortable taking risks. (Rachel, second individual interview, 05.15.2015)

Mastering a practice such as media production does not mean aspiring to become a Hollywood filmmaker. As Daniel Pink (2007) mentioned, mastering a practice means

a never-ending process of becoming better in that practice. Rachel's attitude toward using media production and technology is illustrated in her tweet shown in Figure 6.16. She was motivated and tenacious. She was motivated to advance her students' learning by allowing them ownership and agency over their growth. And at the same time, she preserved technical challenges and was tenacious to continue and find a solution. Rachel explained to me that if other teachers were to adopt her approach, they would need to understand that "it is not about the technology; it is really about them (the students), I guess, buying into whatever we are teaching. So it needs to be something that they (other teachers) are passionate about" (Rachel, first individual interview, 03.24.2015).

Figure 6.16. Rachel's Tweet About Coping with the Technical Challenges. January 11th, 2015.

Tenacity with Integrating Media Production

Although Rachel did not express any fear or anxiety about using technology, she shared many challenges that made her integration of media production more difficult. Being highly driven to make her students "savvy consumers" as she calls them, Rachel was ready to work harder and find ways to engage her students. As mentioned earlier, the iPads had technical malfunctions many times since they were being shared with the whole school. Some examples of malfunctions were when the application could not be updated, they crashed constantly, the iPad did not save or did

not even work, or the iPad was uncharged. In one observation, Rachel was trying to understand how to stop the voiceover from describing every function. Only after she took another iPad and researched how to solve the problem online was she able to resolve the issue, which cost her between ten to fifteen minutes of class time.

Rachel's classrooms were lively and full of action. Rachel accepted the messy engagement that comes with media production and saw it as part of experiential learning. She did ask her students to keep it down, but she also explained in the beginning of class that the students needed to find places to record quietly since everybody wanted to record. Charlotte explained, "The thing that I love: she (Rachel) is natural about it. It is OK if it is a little noisy in here. It is OK if someone makes a mistake" (Charlotte, third interview with Rachel, 06.15.2015). Rachel's attitude toward the limitations of media production and technology challenges was reflected in her comment: "I just get right into it; I guess and you just have to go and be flexible. And you know, be thoughtful of the children who are benefiting from it" (Rachel, second individual interview, 05.15.2015). Rachel was tenacious to continue and make the challenge an educational moment by modeling problem solving to her students and advanced their leadership. But not all students were at the same level.

Media Production is Not Always Differentiated Instruction

The media production activity did not always benefit every student. While for some students the media production activity was a way to share their creativity, for others students it was frightening, confusing, and unclear. Not every activity of media production is differentiated instruction. It can become a class management problem when some students go ahead and start creating while others are struggling. Rachel

aimed to provide differentiated instruction, as in her description of the following situation:

While the other children are doing that (analyzing online visual information), I might pull a small group aside and give them some more information on how to analyze something. “Why do you feel that way about that picture? Do we need to rewrite your storyboard together?” Because it is not beneficial to every child. So it is finding that balance I guess when there is only one of you. (Rachel, second individual interview, 05.15.2015)

One of the questions that Rachel had about the efficiency of media production was when Grace, the math coach, came to explore the use of Explain Everything to practice children’s small group math problem solving. As I observed the work of Grace in Rachel’s class, I saw how some students went ahead and worked on the math problem immediately while others came back and forth to Rachel and Grace to ask for instructions. One group erased the entire problem, and Grace had to go back and recreate the instructions on the application’s screen. Many students struggled with the application, as they needed to change the slide and record themselves through the stages of the problem. Figure 6.17. shows how Rachel was ambivalent of Explain Everything while acknowledging its advantages for voicing students’ thinking; the technical problems became very challenging. Grace reflected on that challenge in her interview, noting “It takes a lot longer for kids to use Explain Everything for problem solving rather than if you would just give them a problem and they would answer on a paper pencil” (Grace, second individual interview, 05.13.2015).

Figure 6.17. Rachel's Tweet on Benefits and Challenges of Explain Everything.
November 16th, 2014.

And yet, both Rachel and Grace expressed the advantage of having the students verbalize their problem solving. Figure 6.18 shows a tweet that Rachel composed as she reflected on children's verbal skills in explaining their math work. Students developed their voice and their conceptual thinking about math, and both Rachel and Grace had a chance to go over the recording and evaluate the students' level. When I asked Rachel about that activity with Grace, she acknowledged the educational value of Explain Everything in general. At the same time, she defined that specific activity as lower-level skill building (seeing it as more of a digital replacement for paper and pencil) that does not have additional value like the PSA production activity using Shadow Puppet. And yet, she did see the additional educational value when it was used for verbalizing and assessment. She explained:

Sometimes I use it for the children explain their thinking so it gives everybody a chance to explain their thinking, whereas if I was working with the whole class, I could not listen to every single child explain their thinking. But when they are recording it, I can go back and listen to it. I can even go back and listen to it at home. (Rachel, second individual interview, 05.15.2015)

Figure 6.18. Rachel’s Tweet on Skill Acquisition with Explain Everything. January 21st, 2015.

With all these challenges, Rachel had the motivation, the support, and the mastery to use media production. In the two years since the digital literacy initiative at the school started, Rachel’s sense of autonomy grew as she explored and developed her pedagogy.

Autonomy: Resources Needed For Personal Growth

Rachel was ready for the digital literacy initiative at Ocean Elementary. She did not need to be pushed out of her comfort zone. She wanted guidance to make sure that her passion for project-based learning with technology was connected to educational goals and was meaningful for her students. Charlotte, the literacy coach, was the one to give Rachel reassurance that her practice was promoting her students’ learning. Charlotte explained, “She (Rachel) just needed one example. That was it. And a lot of people are like that in this school. They just need one example and like permission to take a risk” (Charlotte, focus group, 05.26.2015).

Permission to Play: “Enhancing Learning” as Reassurance

Rachel joined the Catalyst Teachers group in order to share her work with others. During the DigiPlayground sessions, Rachel led workshops to have other

teachers buy into the use of media production in their classroom. I asked her: if she did not come to learn but to share her work, where did she learn to use media production in her teaching? She replied:

I did my work on my own time. I went out and found an app or whatever something that I was looking for and then I used my own time to kind of create things with it. Show my kids, and let my kids to teach me. (Rachel, third interview with Charlotte, 06.15.2015).

Rachel's process of mastering media production took many hours of work at home on her own time and many experiments of trial and error with her students. She explained, "Last year, I was just getting into it. And I still think that this year I have to stop myself. I want to use technology for everything. I think that really, you have to use it meaningfully" (Rachel, third interview with Charlotte, 06.15.2015).

While Rachel was eager to integrate media production, she always asked herself if it enhanced her students' learning. Rachel was intrinsically motivated to use technology and played with it in the classroom. She received permission to play with media production in her classroom from authority figures such as the coaches and the school administration, including the elementary school principal and the school superintendent. As a result, she applied it with one big restriction: does the media production activity enhance the students learning or just replace a non-technological activity? As mentioned earlier, the SAMR (substitution, augmentation, modification, and redefinition) model (Puentedura, 2010) was introduced during a district leadership professional development session by Dr. Hobbs.. Then, Charlotte used it to inform the teachers and share the concept of "enhancing students' learning."

Charlotte wanted to encourage the use of technology and media production if it was used to modify or redefine the educational goals and not just for substitution or augmentation of the traditional goals. I saw the effect of these ideas on Rachel when she shared with me the following example:

I think the most important thing is the SAMR scale. Really I think that's what helped me the most. Because when I was first getting into this, I was really, "I want to use technology for everything," and I felt that a lot of the time I was just using it as a replacement activity and it was not really beneficial. Like "OK, well now we are going to spell our spelling word on Explain Everything." Well what does that do? Nothing. You know what I mean? That is just using technology to use it. I feel like you have to make sure you are using it for a purpose and to enhance your instruction and your learning or else it is not beneficial and you are wasting both of your times. (Rachel, second individual interview, 05.15.2015)

In addition to the PSA project, another effective use of the SAMR model and media production was the use of PicCollage for the students' literacy class. The students read the book *Chrysanthemum* by Kevin Henkes (1991). Together with Charlotte, Rachel divided the class into either dyads or groups of three and gave each a copy of the book, a folder with worksheets, and an iPad. First, students looked at the character traits sheets and discussed what the main character traits were in the beginning of the story and at the end. I observed Charlotte working with one of the groups. Figure 6.19 shows Charlotte pointing at the character trait sheets while asking the students, "What happened that changed the character traits?" She acknowledged

one student who went back to the book to find the specific narrative event in the plot that changed the character traits of the main character, Chrysanthemum.

Simultaneously, Rachel was going between the groups and making sure everyone was on task and not just playing with the iPad. Rachel was asking each group to identify the character's traits and the big event that changed them. Because of the small group discussion and the sheer number of groups, the class was noisy and children were scattered all over the room. The lively hum of activity revealed that all students were working on analyzing the book.

Figure 6.19. Charlotte Facilitating the Discussion of Character Traits on April 2nd, 2015.

Second, the students took pictures that would represent the beginning, the big event that changed the character of Chrysanthemum, and the end. Each student selected one image from the book and took a picture of it using an iPad. They actively discussed what picture would be better to represent the analysis they just did. Figure 6.20 shows how the students took a picture to showcase the character's traits in the beginning, at the end, and a picture of the moment when it changed. Each student took one picture. Third, they used the PicCollage application on the iPad to upload

the pictures and add text to explain their analysis. Figure 6.21 shows how they used the PicCollage application to type the title with the character trait and a sentence from the book. Fourth, once saved, Rachel and Charlotte had a class discussion about the analysis. By the end of the day, Rachel uploaded the collages to the class Twitter account, as seen in Figure 6.21.

Figure 6.20. Rachel's Students Composing a PicCollage. April 6th, 2015.

Figure 6.21. Rachel Shares an Example of Students' Work Online. April 6th, 2015

The book analysis was a successful activity, but it was not without its challenges. Some of the iPads did not work, and some would not permit the children to save their images. Nonetheless, all groups were able to finish the process. Together, Rachel and Charlotte, with the help of a special educator and a parent volunteer, were able to finish this activity in one class period. Rachel pointed out in the interview that this activity was unique since usually she was alone in the class struggling with the technology to work. The fact that Rachel could use her idea of activity with PicCollage and the iPads with such support was part of the administration's permission to play with media production. As Charlotte explained, "For me we are not discouraged to try things, which for me -- that's permission to be autonomous" (Charlotte, third interview with Rachel, 06.15.2015).

In Rachel's case, the permission to play is connected with the purpose of the activity. The analysis of *Chrysanthemum* as a simple media production activity enhanced the students' learning by adding collaborative, creative, and visual dimensions to the regular individual analysis on a worksheet. Similar to the PSA activity, the students learned to voice their ideas, negotiate with their peers, reflect on their work, and "share it with the world" as Rachel said. Having these additional features in the learning process reassured Rachel that the use of media production enhanced her students' learning.

Becoming a Digital Literacy Mentor

Rachel's case study demonstrates how a highly motivated teacher can be encouraged by relatedness to develop her own mastery as she is reassured to feel autonomous to use innovative practices in her classroom. Table 6.4 shows the

variables of interest, and Figure 6.22 summarizes the process of Rachel becoming a self-determined digital literacy mentor. Rachel's motivation was learner-centered (Spirit Guide and Motivator), and she wanted to acknowledge her students' use of popular culture (trendsetter). Rachel's relatedness in school was cultivated mainly by Charlotte, the literacy coach. As part of a job-embedded professional development process, Charlotte supported Rachel's work in different grades levels. Since 2013, Rachel and Charlotte focused on the 2nd-grade and digital-literacy initiative. Charlotte described Rachel as s "go getter. She (Rachel) found her own stuff for the most part. I think I gave her one example of a unit, of how it could be enhanced: the recycling unit" (Charlotte, focus group, 05.26.2015). In a reciprocal process, both Rachel and Charlotte benefited from their work to advance the children's learning by using media production. Knowing Rachel was comfortable having media production activities in her class let Grace, the math coach, come and try activities in math.

Her supportive surrounding, including the Catalyst Teachers and the coaches, promoted her use of the SAMR model to make sure that her activities were connected to the curriculum and enhanced her students' learning. Her practice varied from creating PSAs for science, analyzing books for English language arts, and combatively solving problems for math. It was highly important for her to have authentic learning by sharing the work of her students on the class Twitter and YouTube accounts. Because of her constant use of technology, she faced more technical and scheduling challenges than her own trepidation. She demonstrated tenacity and flexibility as she encountered many technical problems, but it did not

stop her. On the contrary, she used it as a teachable moment about perseverance and problem-solving.

Her main concern was about the connection between the curriculum and the activity, not the messy engagement and the technical challenges. The fact that the class was a little bit noisy and students struggled with technology sometimes was part of the exploration and play. Rachel's autonomy and flexibility came from being highly driven to have project-based learning along with her strong and constant support from Charlotte. When I asked Charlotte how she promoted Rachel and other teachers' autonomy, she answered that "promotion isn't the right word; maybe they need reassurance that yes, it does connect to the curriculum and it is OK to do it" (Charlotte, focus group, 05.26.2015). This is what Rachel needed to become a digital literacy mentor who gave control to her students and integrated media production to enhance their learning.

Table 6.4.

Rachel as a Self-Determined Digital Literacy Mentor

Relatedness	Motivations Shared Goals Collaboration		Spirit-Guide, Motivator, Trendsetter Learner centered, SAMR Coaches
Mastery	Competence	Access Analyze Create Reflect Act	Internet search/iPads/video/Skype Videos PSA using Shadow Puppet Class feedback Twitter and YouTube
	Process		Self-search, brainstorming with coach, explore in class
	Trepidation/ Challenges		Technical problems, differentiated instruction, and messy engagement

Autonomy	Reassurance Structure Exploration	Literacy coach Rubric, pre production, post production Project-based learning (PBL)
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Figure 6.22. Rachel's Self-Determination Model

Chapter Summary

Although Rachel was ambivalent about participating in the research process, she was highly successful in incorporating engaging activities with developmentally appropriate educational practices. For her 2nd graders, Rachel's project-based learning was playful and educational at the same time. Her motivation to use media production in her teaching was supported by the coaches and administration, especially the literacy coach. Rachel had a job-embedded professional development experience that promoted her practice through her relatedness with Charlotte, the literacy coach. That

allowed her to practice media production and use the AACRA model to enhance her students' learning, particularly in developing their concrete operational thinking. She modeled how to troubleshoot and persevere problems that came along. Her reassurance came mainly from Charlotte but also from the administration, who did not prevent her from exploring in her classroom. For Rachel, her permission to play was thanks to the technology, time, and findings that were allocated for her passion to apply project-based learning. Despite all the limitations of technical failures and a lack of appropriate professional development for her level, Rachel was able to thrive and advance her students' and her own learning.

Rachel's journey is a great example of the way that school culture can encourage a highly driven teacher to thrive. With all the limitations of being a public school and with the technical challenges, Rachel was reassured that her work was valuable and acknowledged. The use of the SAMR model allowed Rachel to feel that her use of playful practice as project-based learning was connected to the CCSS and enhanced her students' learning. This was a key factor to make Rachel a digital literacy mentor who supported her students' development as 21st-century citizens and learners.

Chapter 7

Discussion

Almost four years ago, my advisor, Dr. Renee Hobbs, gave me a present for my first semester teaching in the United States. It was Parker Palmer's (2007) tenth-anniversary edition of *The Courage to Teach*. Because of my fear of reading in English in my first year abroad, I put it aside. Four years later, I finally decided to download and listen to the audio book version of the book during a two-hour drive. It was the end of August 2015, and I was in the middle of writing my findings chapters, thinking about how each one of the case studies was similar and different. Being preoccupied with my dissertation, I started to play the audio book and could not believe my ears when the audio narrator spoke these words:

Mentors and apprentices are partners in an ancient human dance, and one of teaching's great rewards is the daily chance it gives us to get back on the dance floor. It is the dance of the spiraling generations, in which the old empower the young with their experience and the young empower the old with new life, reweaving the fabric of the human community as they touch and turn (p. 26).

Palmer's concept of mentoring was exactly what I was looking for to describe the transformation that each one of the four teachers went through. They all transitioned as they used media production from being a teacher-instructor to be a mentor to their students. Palmer explained that often in education we focus on the "what" the content, instead of the "how" the pedagogy, and "why" the motivations. His premise for the book was that he investigated the emotional, intellectual, and spiritual

landscape of teaching in order to answer questions such as “Why are we teaching?” “What does good teaching look like?” and “What is needed to be a good teacher?”

I had to stop the car in order to write it down. It was as if Palmer theorized my research questions about integrating media production into a socio-emotional (relatedness), cognitive (mastery), and inspirational-spiritual (autonomy) concepts. When I reviewed the literature about teachers’ motivations, I had hardly found theoretical frameworks to address the topic. When I moved to the scholarship of intrinsic and extrinsic motivations, I found self-determination theory (Deci & Ryan, 1985). The theory seemed to be useful to answer, in general, my three research questions regarding motivation, practice, and support: (a) Why do some elementary school teachers practice media production with their students? (b) How do these teachers differ in their media production practices in their classes? (c) What is needed to promote the variety of media production practices in elementary education? Listening to Palmer’s framework after analyzing my data enabled me to synthesize the findings into a framework that includes self-determination theory, digital and media literacy, and mentoring.

The following chapter is a summary and synthesis of the previous findings chapters as well as recommendations for applications, strengths, limitations, further research, and a conclusion. First, I summarize and synthesize the data from the multiple case studies into the self-determination theory model. I describe the process of relatedness as a way to self-identify with one’s own motivation while connection socially with others to promote a sense of shared goals. Second, I explain how mastering the AACRA (access, analyze, reflect, create, and act) model (Hobbs, 2010)

offers a systematic structure that allows teachers to take their previous lesson plans and modify them using media production. Third, I portray the process of developing a sense of autonomy by being reassured that media production enhances learning. Fourth, I show how the self-determined digital literacy mentor model can be applied to each case study. Fifth, I offer applications for integrating media production in public schools and the process of professional development on integrating technology. Sixth, I look at the strengths and limitations of my research. Seventh, I recommend future research trajectories in the area of integrating media production in schools. Eighth, I conclude with a call for action.

Summary and Synthesis

This multiple case study offers a detailed investigation of the journey that a group of educators at Ocean Elementary underwent during a two-year initiative to integrate digital literacy into the curriculum. Appendix J provides a chronological timeline of the two-year initiative. Of the 45 full-time staff, only 12 participated in the Catalyst Teacher group that led the initiative in school. Out of the 12 Catalyst Teachers, eight volunteered to be part of the research: four teachers (Sarah, Isabella, Sophia, and Rachel), and four support team members (Charlotte, Grace, George, and Abbie). The three case studies reported here involved teachers who were eager to advance their practice and were highly motivated to learn about media production as a way to enhance learning. Each participant had her or his own history and motivation, but all took part in the research to reflect on their journey and showcase what they learned.

The four teachers showcased in this research advanced their practice of media production as they went through chronological stages of establishing shared goals, struggling and addressing issues of competence, and receiving permission to explore. The following section will describe the synthesis of the multiple case study as one process that unfolded in Ocean Elementary.

Relatedness: Why Teachers Integrated Media Production

We collaborate with the structures of separation because they promise to protect us against one of the deepest fears at the heart of being human - the fear of having a live encounter with alien "otherness." (Palmer, 2007, p. 124)

This research has shown that relatedness promotes innovative practices through dialogue to find shared educational goals. For school teachers, behind a closed door, it sometimes feels like they are working in isolation. But collaboration is an essential stimulus for innovation. Breaking the isolation and connecting to other human beings creates opportunities for change.

Creating a Sense of Shared Goals

When George came back from the 2013 Summer Institute in Digital Literacy, he started to think about how to persuade administration and faculty at Ocean Elementary to buy into digital literacy. As a professional media maker, he knew that he was too biased and needed support from other colleagues. That help came from Charlotte, the literacy coach, who saw the potential and used her experience with

adult education to enroll first the 4th- and 2nd-grade teachers to explore the concept of digital literacy. Her strategy was to create a discussion of educational values using a book club reading of Dr. Hobbs' book with David Cooper Moore, *Discovering Media Literacy: Digital Media and Popular Culture in Elementary School* (2013).

Each one of the teachers and support team members expressed how the discussion in the book club was the starting point for each and every one of them to think about how they would use media production. The early morning, once-a-month sessions before school made them think about their personal and professional motivation to use media production, a practice they were not familiar with. This discussion sparked many creative ideas from each and every one of the teachers. Sarah recognized her obligation to teach digital citizenship and was looking for a platform for her historical figure project when she found Glogster. Isabella and Sophia started to brainstorm with George on different kinds of production their students could do. Rachel tried Haikudeck as an online platform to create presentations. All teachers started to explore media production once they discussed among their colleagues and agreed on some shared educational goals. Being the authority on curriculum design and implementation, Charlotte's contribution was crucial to not only give permission but mainly to model by making videos and coming to the classroom to practice media production as aligned with the CCSS. In order to better understand the similarities and differences of the research participants' motivations, I present the profiles of the eight faculty whose work is described in this dissertation.

The digital learning profile (Hobbs & Tuzel, 2015) identifies 12 primary motivations of teachers who use digital media and technology for learning. Figure 7.1 shows the motivations of eight research participants. It reveals that most are student-centered (Motivator, Spirit-Guide) and/or inquiry-based (Demystifier). A smaller number of faculty were also text and audience focused (Alt, Trendsetter) and/or content and quality focused (Professor, Taste-Maker). While none of the participants had the same combination of motivations, all had either Motivator and/or Spirit Guide. All participants agreed that using media production enhanced students' engagement. Sarah valued the students' troubleshooting and media literacy skills learned during their research and production. Isabella and Sophia used media production for promoting inclusion and positive behavior using their own creative YouTube videos. Rachel applied media production for enhancing her 2nd-graders' concrete operational thinking and civic engagement.

School administrators recognized the strategic timing of the digital literacy initiative as it intersected with teachers' motivations. When I interviewed Diana, Ocean Elementary's principal, during the last week of school, I asked her to reflect on why she thought that the teachers were motivated to implement media production activities. At first she explained that the initiative came at the right time, when teachers were tired of top-down curriculum and testing and were looking for a place to be creative. But then she added: "The world right now is all about technology, media, and we need to keep up with that.... Shame on us if we don't keep up with it" (Diana, individual interview, 06.17.2015). As Diana demonstrated, there was an agreed sense of shared goals that Ocean Elementary students must experience

learning through digital media because it is timely, effective, and the educators' moral obligation as 21st-century educators.

Figure 7.1. Participants' Digital Learning Profile Results from March Survey.

All participants saw the advantages and opportunities of using digital media by applying the SAMR (substitution, augmentation, modification, and redefinition) model (Puentedura, 2010) as a justification to use media production in their classroom with their students. Most of the teachers had a higher score on the empower scale than the protect one, with the exception of Sophia, whose protect score declined over the course of the year. Their experiences in the classroom and their engaged discussion with colleagues may have helped them develop a more nuanced understanding of the opportunities and advantages that digital media offers to their teaching and students' learning as compared with the risks and challenges of using digital media.

Collaboration: Community of Practice for Media Production

The book club stimulated an interest among the faculty to start implementing media production as they developed a sense of shared goals for enhancing student learning. Ocean Elementary already had a culture that valued a community of practice (Lave & Wenger, 1991; Wenger, 1998), which helped the successful integration of media production in the school. But it was not until each teacher discovered her own relatedness to another member of the book club that each one started to integrate media production in her classroom. Sarah started to value media production as she participated in the book club discussion, but it was only after George offered to help with the technical issues that Sarah started to explore how she could use video production or multimedia posters. Sophia had Isabella, and together they supported each other and promoted the exploration in their inclusive classroom. Rachel was brainstorming with Charlotte, and together they tried to connect the Common Core State Standards (CCSS) with a media production activity. Each one of the teachers had at least one significant support person to brainstorm, ask for help, and reflect upon their use. After they finished the book, the school administration, in collaboration with Dr. Hobbs, developed a plan to establish a Catalyst Teachers group for professional development.

The administration put out a call for all full-time teachers to nominate themselves to be part of the new group. The service providers, such as the school psychologist and the speech pathologists, could not participate. They told me that they were disappointed that they could not join the group, but they came to the DigiPlayground sessions to learn more about what the Catalyst Teachers had learned.

The Catalyst Teachers group included 12 elementary school participants selected by the school administration. The group met four times and each time explored a topic and set of issues developed by Dr. Hobbs in collaboration with school leaders. The first session was mapping and celebrating what had been done the previous year. In addition, Dr. Hobbs introduced her AACRA model, which participants had read about a year before in the book club. The second session was building personal goals for digital learning and brainstorming a plan to host a professional development (PD) day in March. In the third session, participants produced media, learning to tell their story and advocate for their work in the classroom using digital storytelling tools. At the final session, they talked about the connection between home and school, developed a list of shared values, and brainstormed how to use the power of social networks to advocate for students' media products. During these sessions, the teachers had time to reflect on their goals and vision using media production. They learned about the model of UnConference for the PD day and experienced media production with new tools such as Videolicious, FlipGrid, TodaysMeet, and Titanpad. Having an out-of-school expert inspired the teachers, as I will elaborate below when I talk about the concept of autonomy.

It is important to note that the faculty of Ocean Elementary sustained their relationships in learning about digital literacy beyond what the university partner and school administration contributed. The community of practice had many members that helped each other on a daily basis. In addition, Charlotte organized the four DigiPlayground sessions, which were especially effective as a time and place to talk and see how media production enhances students' learning. Figure 7.2 shows an

image of the classroom where the DigiPlayground sessions took place. The room had several areas to practice and work either in pairs or in small groups to go over a tool or practice. In addition to these DigiPlayground sessions, George, the library media specialist, or Charlotte, the literacy coach, extended the exploration into the teachers' classrooms. George's green-screen studio in the elementary library allowed Sarah, Isabella, and Sophia to send their students to the library to film and edit video projects. Figure 7.3 shows one filming session in the library under George's supervision. Charlotte came into classrooms to support student learning when she was asked to, like during Rachel's book analysis using PicCollage. I also observed how Grace, the math coach, and Abbie, the behavior specialist, also came into the teachers' classroom and helped them use media production. Grace focused on how storytelling techniques using iPads can promote problem solving. Abbie used video production to advocate for positive behavior reinforcement. While sharing the same educational goals, it was the personal-professional relatedness and interdependence that motivated the four teachers to explore media production in their classroom.

Figure 7.2. Panoramic Picture of DigiPlayground on December 10th, 2014.

Figure 7.3. George Guides Isabella and Sophia's Students in the Studio

Not all teachers participated in the digital literacy initiative, and there was some grumbling and controversy associated with the initiative. Only gradually did I understand the dynamics of the political process that was also unfolding at Ocean Elementary. There was a complex political undercurrent that made it difficult for me to understand why some teachers did not participate in the initiative. Some teachers resented that teachers were encouraged to volunteer in DigiPlayground sessions. The teachers' union was formally opposed to these sessions, arguing that teachers should not volunteer their own time. The union's argument was a good one: under the contract, professional development is supposed to be paid and take place during working hours. During the year, I learned that it had become a battle between the union representative at Ocean Elementary and the administration. While few teachers wanted to talk about this issue, the power struggles were easily observed. For those who attended, coming to the DigiPlayground sessions was a statement against the union. In addition, the school had three main social groups: the Catalyst Teachers, the union representatives, and the neutral staff who were disengaged from the power struggles.

Everyone in the school, whether they participated in the program or not, was influenced to some degree by the two-year focus on digital literacy. Some members of the union representatives' group were actively aligned with a protectionist approach to media, talking to me about their concerns about a decline in children's handwriting skills. Coming back to Cuban's (1986) research about the historical ineffectiveness of US technology integration that disregarded teachers' needs, the union group felt that the digital literacy initiative was a top-down policy aimed to undermine teachers' power. Ironically, even these teachers did some digital media production activities with students. For example, all of the union group members collaborated with George to have their students produce videos as part of their curriculum and civic engagement activity for the end of the year. Though they were openly rejecting the Catalyst Teachers' community of practice, they embraced media production through their relatedness with George.

Mastery: How to Practice Media Production

Rather than use that space to tell my students everything practitioners know about the subject--information they will neither retain nor know how to use--I need to bring them into the circle of practice in that field, into its version of the community of truth. (Palmer, 2007, P. 124)

This research has shown that in order to master teaching media production, the teacher can build upon previous assignments and modify them, scaffolding their own competence along with their students.

Modifying Existing Practice with New Opportunities

Integrating media production as a pedagogical practice was easy once the teachers modified lesson plans and assignments that they were familiar with. Many of the documented media productions in this research were modified activities. Sarah took her historical research in social science and modified it into Glogster assignment to research multimedia information and create a historical narrative on a digital poster with multimedia. Isabella and Sophia took a book report assignment and modified it into a video production that analyzed the book and advertised it to a lower grade. Rachel, together with Grace, modified an activity of math problem solving from a written assignment to a screencast and voice recording assignment. In addition, Rachel created a new assignment in science with her public service announcement (PSA) for reusing recyclable materials.

Each teacher had a variety of media production activities in her class. As I have described in the preceding chapters, in order to analyze the data, for each teacher, I created an index of her media production projects. It varied by format, subject matter and the duration in class. Synthesizing all three indexes, I can see that each teacher tried to integrate media production in different subject matters with different tools. The support from Charlotte, Grace, George, and Abbie allowed having a go-to person for each subject English language arts and science (Charlotte), math (Grace), social science (George), positive behavior interventions and services (PBIS) (Abbie). The technology at the school, such as the open access to broadband Internet including social networks and Google, the two laptops carts, the two iPad carts, the Promethean board, and three desktops in each class, provided an opportunity to try

and explore different formats of media production in the classroom and at the library green-screen studio.

Redefining Media Production for Education

For Ocean Elementary teachers, having the sense of shared goals to enhance their students' learning using media production was not enough. They wanted to see examples of applicable use of media production to their own educational context. The book club provided discussion about the way that the examples in Hobbs and Moore's (2013) book could be applied to Ocean Elementary. The AACRA model presented in the book eased the way for the faculty to see how they could take familiar and successful assignments and transform them to include a media production activity that would add depth to their educational goals. This research demonstrates the value of the model for professional development since besides the AACRA model, the existing literature on media production in elementary education did not seem to offer any concepts to support teachers' curriculum design process.

The literature on media production for education primarily described it as a critical practice to understand how to convey and evaluate media messages via video composition (Buckingham, 2003). Hence, the literature on instructional design for media production units borrowed the media industry model of a linear step-by-step process combined with the semiotic process of Kress and Van Leeuwen's (2001) multimodality model (Burn, 2009). The Hollywood production process is organized into three phrases: pre-production, production, and post-production. As I described in Chapter 2, most of the literature about media production for education transforms the Hollywood model to the educational setting by applying the three stages as a

chronological process with an emphasis on production. For example, the British Film Institute issued a series of teachers' guides to media production on scriptwriting, editing, and the overall production, looking at it from a vocational and critical aspect (Fraser & Oram, 2003; Readman, 2003; White, 2007). However, this structure may not be suitable for a classroom setting that has one or two class periods to produce a media message for educational purposes. In Chapter 2, I described how these models neglect to focus on student learning because they focus more on the acquisition of technical skills. Some researchers developed models that are more closely aligned with the AACRA model, as demonstrated in the work of Ohler (2008), who extended his definition of digital storytelling to the educational setting by adding a primary and a final stages (brainstorming, pre-production, production, post-production, and distribution). Still, Ohler's model is still chronological and industry-based rather than education-based. As I was observing the work of the teachers in their classrooms, I found their use of the AACRA model to be useful to them in how they conceptualized media production as an educational tool.

The iterative, literacy-based model of the AACRA model offered to elementary school teachers provides a more comprehensive and doable process of integrating media production in their teaching. As described in Chapter 2, it combines Vygotsky's (1978) use of play as a scaffolding strategy with the New Literacies scholarship (Leu, Kinzer, Coiro, Castek, & Henry, 2013; The New London Group, 1996). The five digital and media literacy competencies (access, analyze, create, reflect, act) with examples of applying these competencies as educational activities of media production (Hobbs, 2011; Hobbs, & Moore, 2013) supported teachers'

curriculum development processes during the time I observed their work in the classroom. Each one of the case studies offered in this dissertation demonstrated teachers' unique interpretations of the AACRA model. For example, Sarah used the AACRA model to have her students research the impact of historical figures and create narratives in the form of multimedia posters and showcasing them to their friends and families. Isabella and Sophia used the AACRA model with George to have their students analyze a book and create a trailer for the 1st graders, who came to watch with the author and illustrator of the book. Rachel applied the AACRA model as a process of researching information about reusing recyclable materials and creating a PSA to post on social network and to present in front of the school committee in Town Hall. Each teacher used the AACRA model differently. While Sarah, Isabella, and Sophia used it as a chronological step-by-step process with a showcase at the end, Rachel used a more spiraled application going back and forth to modify the work till completion.

This dissertation confirms what other researchers have demonstrated: there are many benefits that students gain as a result of experiencing media production. Aligned with the literature, the teachers perceived that their students were more engaged, collaborated, explored their identity and voice, problem-solved, enhanced their conceptual thinking, and were socially responsible (Bazalgette, 2010; Burn & Durran, 2007; Dezuanni & Gattenhof, 2015; Donohue, 2015; Kennedy & Swain-Bradway, 2012; Willett, Richards, Marsh, Burn, & Bishop, 2013). Teachers were more motivated to use media production when they could witness these benefits as they unfolded in their classroom with their students. As I demonstrated in the

previous chapters, using media production provided authentic learning, collegial collaboration, a sense of their own agency, connection with the community, and a form of summative and formative assessment.

While observing the process of each teacher, I could see that the advantages of using media prevailed over its challenges. This is not to say that the challenges were not a high hurdle to overcome, but the tenacity of the research participants showed me how public elementary school teachers can address media production challenges. Sarah was critical about the reviewing process of her Book Hooks project, which did not have a reflection stage and a rubric as she did with the Glogster project. Similarly, Sophia thought that there needed to be more quality control and feedback during the process of the Book Trailers and so Isabella and Sophia had a reflection session to allow students to modify their video. Rachel needed to spend a vast amount of time troubleshooting and using it as a teachable moment. In each example, the teachers were not only passively persevering but actively showing their tenacity to overcome the challenges.

Tenacity: The Never-Ending Process of Mastery

In this dissertation, I demonstrate how teachers experienced many challenges to integrate media production into their classrooms, and yet, they displayed tenacity in overcoming obstacles because they were determined to model the process of problem-solving. Seeing others always experience technical difficulties and messy engagement reassured the four teachers that the challenges were inherent in the process. The four teachers acknowledged that these challenges did not reflect on their proficiency but were part of the process that needed to be embraced. In the literature,

often we find examples of students' transgression behavior (Tobin & Grace, 1998), low-quality production results (Parry, 2013), and technical malfunctions (Burn & Durran, 2007) as part of integrating media production in elementary school. Indeed, this dissertation shows that the use of digital media technology does add an additional level of challenge to classroom management. Fears about messy engagement, unwatchable artifacts, and technical failures increased the trepidations of teachers. I observed how all these challenges happened in each class during the integration of media production. And yet, the common behavior of all four teachers was their tenacity to overcome the challenges in order to execute the media production activity.

Aside from technical challenges, teachers faced curriculum design challenges as they strived to create meaningful learning experiences for students. The challenges to implement media production varied in their form for each teacher. For example, Sarah saw how her students were able to be playful with video production at the library, but could not achieve a meaningful finished video production that showcased their reading comprehension, analysis, and synthesis. When Rachel's students saved their project on the Shadow Puppet app, they could not go back and edit. Many times, Rachel would give feedback to make small modifications and her students had to go over and recreate the presentation and re-record their voice.

Being highly motivated to integrate media production was a key factor in the four teachers' attitudes, but also in their support from their peers. The role of job-embedded professional development is to give daily support of teachers' content-specific instruction to enhance their students' learning (Croft, Coggshall, Dolan, & Powers, 2010). The work of Charlotte, Grace, George, and Abbie followed that

definition. As I was sharing the same workspace with Charlotte and Grace, I could see in many occasions how they supported the teachers in one-on-one sessions as well as during the Catalyst Teachers session, DigiPlayground, and during PD sessions. Charlotte was showing to teachers how to use media production for English language arts and science, using activities that promoted writing, reading, speaking, and listening skills. Grace was working on using media production for problem-solving and was focusing on verbalizing the solving process. George was supporting the video production activities with the green-screen studio and the editing suite at the library. Students would come either during class or recess to produce and learn the technical skills. Abbie was supporting positive behavior through the use of media, either during her sessions with the students or as a supporter in full-time teachers' classrooms. Sarah, Isabella, and Sophia took advantage of George's support while Rachel worked with Charlotte. Grace worked with Abbie on math intervention using screencasts for the 4th-grade students. Having a group of colleagues that can support immediately, either by troubleshooting or supporting the content, promoted the integration of media production.

Mastering competence is a never-ending process (Deci, & Ryan, 1985; Pink, 2009). By acknowledging the fact that they are not professional media makers but thriving to develop their competence in production and education, all participants demonstrated their mastery. Sarah and Barbara saved the project on the iPads and showcased them later on, since SeeSaw was not installed. Isabella and Sophia used another form of media when the application was not updated and did not grant access. Rachel used another device when the iPad was not charged or was broken. Moreover,

each one was promoting their students' problem-solving by handing them control over troubleshooting. Sarah, Isabella, Sophia, and Rachel all had students help them with technical issues. More than solving the immediate technical problem, it was a way to model leadership and responsibility for their students. Their demonstrated tenacity was exhibited in their emotional ability to "let it go" and be learner-centered. Having their students take a lead was the biggest step for each one of the teachers on their way to becoming a digital literacy mentor.

Autonomy: What Kind of Support is Needed to Teach Media Production

When we are willing to abandon our self-protective professional autonomy and make ourselves as dependent on our students as they are on us, we move closer to the interdependence that the community of truth requires. (Palmer, 2007, p. 144)

This research has shown that abandoning self-protective autonomy occurs when teachers have the genuine autonomy to choose to be connected and give more control and shared responsibility to their students.

This is a difficult set of goals to reach, especially in the context of American public education. As part of being a Title I public school, Ocean Elementary receives Race to The Top funding. Along with the new CCSS assessments, such as the partnership for assessment of readiness for college and careers (PARCC) tests, the students were tested for state standards and district standards for two months. If that

is not enough, the 4th-grade teachers had to implement a new rigid curriculum in math. Sadly, such testing pressures plague most American schools (Ravitch, 2014). And yet, many researchers who have studied media literacy in K-12 education neglect to consider the complex political and structural features and context of American public schools (FisherKeller, 2013; Ito, et al., 2013; Jenkins, et al., 2006; Tyner, 2010). For most teachers, the amount of autonomy to integrate media production is limited because of these other pressures. As this dissertation demonstrates, support, reassurance, and permission to play are essential in order for media production to be a part of the instructional practices in the elementary grades.

Reassurance From In and Out of School

The teachers had shared goals, competence, and tenacity to integrate media production, but they also needed encouragement that all these efforts were valued. Being reassured that your hard work is meaningful is a human need whether you are intrinsically or extrinsically motivated. As I described in Chapter 2, Maslow (1970) recognized that in order for a person to thrive and be creative, they need to feel a sense of belonging and sense of self-esteem. The teachers' relatedness fostered a sense of belonging to a shared vision of educational goals to use media production. The mastery with the job-embedded professional development advanced the sense of self-esteem and being proficient enough to use media production. As I have shown here, to get to the highest level of self-actualization or self-determination, teachers had to feel autonomous to play, try, and explore under the demanding standards of a public school setting.

Though it was out of the scope of this research, administrative support proved to be a crucial support alongside the community of practice. When I interviewed Diana, the principal, she explained that for her, modeling the use of media production and coming to the Catalyst Teachers' sessions was her way of reassuring the teachers. For Diana, she did not just send an encouragement on the school greater listserve every time that a teacher shared a media product that her students did. Diana also used media production in her weekly parent report to showcase to the community, including the teachers, how important this practice is (Diana, individual interview, 06.17.2015). In doing so, Diana hoped to waive in the teachers who saw that the administration was encouraging this interactional strategy within the school. Furthermore, when Diana presented the digital literacy initiative in the school to the principals' association and the school committee on different occasions, the amount of comments for her own posting encouraged her to keep producing media.

The support within the school included the administration and the support team members, who offered much reassurance. During the book club and as part of the job-embedded professional development, the coaches and specialists encouraged teachers to use media production. Charlotte built different units with Rachel and the other 4th-grade teachers. Grace came into Rachel's class and had a media production activity with math and did interventions using screencast with the 4th grade students. Abbie came to support Rachel's media production activity and modeled to Sarah, Isabella, and Sophia how their students could produce a meaningful media production about positive behavior reinforcement. Evidently, George, who had the media industry experience, offered many examples of reassurance that media production is a

legitimate practice in school for educational purposes with his use of the green screen studio and the editing suite.

It's important to note that the participants who volunteered for this research process did so in order to deepen their reflective practice as educators. As I mentioned in my statement about researcher positionality in Chapter 3, I struggled with the role of being an observer and a participant. When I was documenting with the camera, sometimes teachers would look at me as if they needed help or reassurance. Depending on the situation, I generally did not intervene. However, after the observation and during the last interview, I provided warm feedback to teachers. This form of support, while done as part of the research process, did serve a professional development goal. Being a researcher and providing professional development were indeed deeply intertwined, as this dissertation demonstrates. While documenting the Catalyst Teachers' session and the district leadership sessions with Dr. Hobbs, I saw a significant impact on the teachers' autonomy. The university partnership with Ocean Elementary started when George came back from the Summer Institute in Digital Literacy in the summer of 2013. Later that year, I came to give monthly workshops where I demonstrated lesson plans and tools for the teachers. Dr. Hobbs came to give a keynote at the March 2014 PD day. The next year, Dr. Hobbs gave four session at Ocean Elementary for the Catalyst Teachers and five leadership sessions for the district administrators and support team. I started to support the initiative by being in the same room as Charlotte and Grace three days a week. Dr. Hobbs' and my presence as experts in the field of media production for

education reassured the teachers that they were not alone and that it was a valued practice.

Not only did Dr. Hobbs' and my experiences as media educators and the fact that we gave many examples of successful integration of media production in other similar settings contributed to the teachers' senses of autonomy to use the practice. Sarah and Charlotte came to the 2014 Summer Institute in Digital Literacy, and Isabella came to present at the 2015 Summer Institute in Digital Literacy. Rachel went to the Google Jamboree in Cambridge, MA, and with Charlotte presented at a statewide educational conference. For teachers, seeing exemplary applications of media production helped them become more independent. In order to transition from being teaching-based to learner-based, the teachers needed examples that they could see as models as well as validation that they could mentor their students to play with media production.

As a researcher, I now recognize that my work (and the teachers' perceptions of my expertise) contributed to the advancement of the teachers' autonomy. For example, as part of member-checking, I sent a draft of these chapters to the participating teachers. While Sarah appreciated my efforts to synthesize to make a coherent narrative of her process, she felt uncomfortable with my use of the term "chaos" to describe the messy engagement in her class. After explaining that I meant that her classroom was noisy and disordered as students helped each other, I showed her how I valued her decision to give students control and autonomy. Sarah felt reassured by this comment because I acknowledged the value of her pedagogical process. Sarah's "chaos" was a form of playfulness that I valued. My reassurance

helped her appreciate its relevance to students' personal and social development as well as meeting specific instructional goals.

Playfulness and Systematic Structure

Playing with media production can be very frightening for a public school teacher. The messy engagement with noise and disorder in the classroom can be seen as chaotic and distracting from the learning process. Still, the teachers at Ocean Elementary were able to balance the messy engagement with structured assignments that met the educational standards. The use of rubric in the 4th grade allowed a structured feedback while the recording was messy. After receiving the feedback, many students in Sarah, Isabella, and Sophia's classes modified their work. Though the production itself was messy, the feedback was systematic. Together they allowed the students to play while developing their skills and learning to use media messages effectively. In Rachel's class, the students had assignment sheets to keep them on track. In 2nd grade, the messiness of producing media can evolve into chaos quickly. Nevertheless, Rachel, with the help of Charlotte, Grace, Abbie, and other staff members, was able to allow her students to play and be accountable when reflecting on their work and going over their checklist of assignments.

Isabella and Sophia modeled their use of playfulness with their YouTube channel series, Teacher Talk. Unlike Sarah and Rachel, who had a professional attitude, Isabella and Sophia felt confident enough to be playful with their students using their own media production as a motivator. Their videos added a playful aspect to the highly systematic structure, which ensured the students would meet the educational standards, according to Sophia. Interestingly enough, the students

imitated their teachers' playfulness when they were at the library's studio filming their own production. This opened the opportunity for Isabella and Sophia to reflect with the students on the message and content of their video.

Being a digital literacy mentor in a public school is not an easy task. As this dissertation has demonstrated, it demands that the teacher balance playfulness and exploration along with structure and standards. In order to integrate media production with this balance, teachers must feel a sense of autonomy and reassurance from authority figures both within and outside of the school. This process is the peak of a long process that starts with relatedness, continues with mastery, and ends with autonomy.

The Self-Determined Digital Literacy Mentor

“If leaders are to help create good talk about good teaching, they need to discern the difference between what faculty sometimes say about themselves and what their real needs are” (Palmer, 2007, p. 163).

This research identifies the three fundamental needs of teachers as they integrated media production into the elementary curriculum: relatedness, mastery, and autonomy.

As I explained in Chapter 2, in a discussion of Maslow's (1970) hierarchy of needs, once one set of needs are met, the individual moves to fulfill the next set of needs. As public elementary teachers, Sarah, Isabella, Sophia, and Rachel advanced

their sense of shared goals to meet their need for relatedness. They grew their sense of competency to fulfill their need of mastery. And they developed a sense of reassurance to explore media production to satisfy their need for autonomy. Figure 7.4 shows the three models of becoming a self-determined digital literacy mentor for each of the three case studies reported in this dissertation. As we have seen, the process was similar in its linearity but diverse in the fulfillment of each of the teachers' needs.

Figure 7.4. All Three Case Study Models of Self-Determination

As I demonstrate in this paper, the value of media production is not in the instructional practice itself. Rather, media production helps develop the teachers' sense of self-determination, advance their own ability to connect with their peers, feel proficient in their instructional practices, and feel free to explore new instructional practices while granting more control to their students. Having a self-determined teacher is likely to offer students a valuable role model, as children witness teachers who are able to collaborate with others and demonstrate coping skills in solving problems. In this study, I did not study the impact of media production on students, although evidence from students' artifacts showed the depth of their research, synthesis, creativity, and communication skills. Over and over during these

observations, I saw how the teachers developed their own mentoring identity as they went through the process of becoming self-determined digital literacy mentors.

So, in effect, becoming a digital literacy mentor was the ultimate outcome of implementing media production in the classroom. By going through the three levels, the teachers developed their digital literacy mentor identity and practice (a) by using media production to achieve a sense of shared educational goals such as the SAMR model, (b) by applying the AACRA model to have sequential practice of media production to advance digital and media literacy competencies and the subject matter standards, (c) by being tenacious and persevering technical issues and messy engagement, and (d) by learning to give control to the students and balance systematic structure with playfulness of media production. Becoming a digital literacy mentor starts with building trust to even begin to think about integrating media production. It continues with building confidence, and then it is all about allowing the exploration and play of the teacher and her or his students' creativity. In ways that parallel Maslow's hierarchy of needs, I discovered that teachers start with a social and emotional need, continue with a cognitive and vocational need, and reach towards inspirational and creative need.

Other scholars have adapted Maslow to address the process of technology integration (Bailey & Pownell, 1998; Bichelmeyer, 1991), defining the physiological and safety levels as equipment, time, and policy. In my research, these needs were not a focus of my study because generally, all these needs were met. Since Ocean Elementary teachers generally had access to equipment and time to plan and execute, this research omitted these stages. Clearly, when there were technical difficulties in

the classroom, I observed that the creativity, competency, and educational goals were on hold for a moment. In the previous chapters, I show that all four teachers let their students help them problem-solve. The use of a student leadership model, in fact, seemed to prevent teachers from getting discouraged when they experienced technical challenges. As for scheduling, having George in the library created flexibility in scheduling because projects could proceed outside of the classroom time, at recess, and after school. As for policy issues, the fact that the principal and superintendent both took part in professional development sessions with Dr. Hobbs showed overt encouragement to use media production.

As I described in Chapter 1, in many K-12 initiatives to integrate digital technology, teachers are sometimes forced to comply by using certain software and equipment without adequate professional development. Even worse, they are not included in the initiative, and the teacher has no control over what technology is purchased, implemented, and used. In these cases, the effectiveness of bringing technology into the classroom is compromised (Cuban et al., 2001).

Many school administrators recognize that simply purchasing technology will not create conditions where learning with technology occurs, as the now-infamous case of the federal investigation of the Los Angeles school district's iPad initiative reveals (Blume, 2015; Gilbertson, 2014). Rather than focusing on students' test scores as the outcome, school administrators should focus on empowering teachers to model self-determination, which may benefit the advancement of students' 21st-century learning skills. Having a goal such as becoming a digital literacy mentor creates a purpose and clears the way to see what steps are needed to integrate technology

successfully. I now understand that media production as just an instructional practice has no meaning and no reason to be assimilated into lesson plans. It is, however, an effective tool to give freedom for teachers to become mentors who foster their students' sense of independence and engagement in learning.

This study documents the process of four teachers as they became self-determined digital literacy mentors. Based on the data analysis I report in this paper and building upon the work of Maslow (1970) and Deci and Ryan (1985), I propose a conceptual model of how professional development in media production addresses teachers' needs for lifelong learning. Figure 7.5 shows the model that I have conceptualized from synthesizing the scholarly literature in light of my own original research.

The model is hierarchical. First, there needs to be available equipment in the school and in the classes. Second, there needs to be a policy to allow time for professional development and integration of media production. Third, there needs to be a sense of shared goals and relatedness to the educational use. Fourth, there is need to be support to built confidence and master the practice. Fifth and last, there needs to be a sense of autonomy that students can play and explore while aligning with educational standards. In the next section, I consider the potential of this model for professional development purposes, as it may help advance teacher empowerment in digital literacy in other contexts

Figure 7.5. Model of Self-Determination Process to Integrate Media Production

Implications: A Model of Media Production Integration

We can look at the Ocean Elementary multiple case study as a way to better understand why, how, and what is needed for a successful technology integration. The purpose of this research was exploratory—to understand how to motivate teachers to use media production for the benefit of their students. At the beginning, I assumed that answering the questions about why to use media production, how to use media production, and what is needed to integrate media production would help me create a pathway to transfer my findings to other educational settings. While it might be the case, the findings and analysis of the multiple case study showed that teachers become empowered when their social, emotional, cognitive, and spiritual needs are met.

I offer five recommendations that will be useful to school leaders, professional development experts in digital media literacy integration, and the research community. Table 7.1 presents these recommendations. In order to successfully integrate media production into the elementary grades, I recommend: (a) focusing on intrinsic motivations by addressing social-emotional, cognitive-vocational, and spiritual-creative needs of teachers; (b) creating a collaborative environment with faculty, staff, administrators, and students to create a community of practice; (c) building upon and modifying existing curriculum activities; (d) using media production practices to balance systematic structure and playfulness, scaffolding small assignments in a spiral process to align with educational standards, and sharing student work to advance civic engagement and school visibility; and (e) looking beyond the school setting to partner with organizations or use social networks.

Table 7.1.

Recommendations for Professional Development: Using the Self-Determination Model for Media Production

Recommendation	Practice	Dimension
1. Focusing on intrinsic motivations	A. Social-emotional	Relatedness
	B. Cognitive-vocational	Mastery
	C. Spiritual-creative	Autonomy
2. Collaborating with community of practice	Finding a meaningful colleague	Relatedness
3. Building upon existing assignments	Applying the SAMR model	Mastery

4. Having systematic/creative/engaging process	A. Balancing structure and play B. Scaffolding using AACRA C. Sharing students' artifacts	Mastery
5. Searching beyond school walls	Partnership or online communities	Autonomy

Intrinsic motivation is the most effective drive to engage a person (Pink, 2009). There might be extrinsic factors, but if a person is not intrinsically motivated, she or he will not keep that activity for long. For that reason, focusing on the individual intrinsic motivation can promote their integration of media production. In order to intrinsically motivate a person to use media production, the hierarchy of human needs guide us to look first at the sense of belonging. Relatedness is a social-emotional dimension that values the collaborative work and the sense of shared goals. Fostering relatedness will open the door to start exploring media production. Mastery is the next level with cognitive-vocational dimension that values the sense of competencies of the teachers to integrate media production. By working on mastery, the teacher feels competent and equipped to be tenacious to address all the technical, management, and content challenges. Job-embedded professional development within the school as a daily support contributes to the competency of teachers. Last, autonomy is an inspirational-creative dimension that inspires teachers to be playful with their students as they together explore the power of media production. The development of a sense of autonomy allows the teachers to become digital literacy

mentors and to give control to their students as a way to enhance their learning. This individual-intrinsic focus insures that the teachers feel trust (social-emotional/relatedness), confidence (cognitive-vocational/mastery), and playfulness (inspirational-creative/autonomy).

Collaboration is the key to a successful implementation of media production. For such a complex activity that demands a large skillset, support and mutual responsibility would promote the engagement of teachers who have not used media production before. Ocean Elementary had an established community of practice that was effective as a systematic support for teachers. The support team, such as literacy and math coach, behavior specialist, and the library media specialist, was useful for different teachers. The diversity of the support role enabled the teachers to choose who they wanted to collaborate with and for what purpose. In addition, other partnerships within the school were highly effective, such as co-teachers, same grade-level teachers, and different grade-level teachers. The most effective one for each case study was the collaboration with the classroom students. Giving a leadership role advanced the students' learning and promoted their responsibility for their own education.

Building upon existing activities is an easy and effective way of mastering a new competency such as media production. Applying the SAMR model (Puentedura, 2010) promotes the transformation of existing assignment to become a media production assignment as the teachers modify or redefine the educational goal to have additional digital and media literacy competencies. Because media production has so many benefits, as mentioned before, transforming an assignment such as writing a

book report, problem-solving an equation on a sheet, doing a scientific experiment, or doing a social science study can be easily made into a media production project.

Having the successful experience of a well-structured lesson plan eases the way for a teacher to feel confident in the assignment's educational goals. Furthermore, building upon an existing lesson plan makes it easy for the teacher to add the media production components according to the AACRA model.

Mastering media production has three more components than a regular educational assignment. In order to practice media production masterfully, teachers should (a) balance a lesson plan with both a systematic structure and playfulness; (b) structure the process as a spiral growth where each small assignment advances a specific skill that is aligned with educational standards, and (c) share the students' artifacts to connect the students and school to the community. A media production activity is on one hand a procedure with systematic stages that build upon each other. On the other hand, this is a creative and playful activity. Mastering media production means that the teacher can balance the systematic structure to ensure that each step is met and contributes to the next one while students learn from their play and express their creativity. In order to structure the process of media production, the teacher can use the AACRA model (Hobbs, 2010). Dividing the production into five separated stages promotes different skills: access, analyze, create, reflect, and act. Last, for the purpose of authentic learning and civic engagement, it is important to be able to share the students' artifacts with the community. Students will be more engaged and committed if they know ahead of time that their work is going to be showcased in a presentation, exhibition, or online. While these recommendations seem easy to

implement, especially with the support of a community of practice, it is often the presence of an inspiring out-of-school person that helps make the proposed modifications.

Looking beyond support within the school inspires teachers to innovate as they apply practices that have been successful elsewhere. A partnership with an outside organization or a university or even finding a relevant online community would benefit the teachers by giving exemplary uses of media production. A fresh look from an outsider promotes innovative practices. Moreover, being an authority to showcase that media production can be integrated with a small budget, with standardized tests, with no prior experience as a media professional. By bringing in out-of-school experts, they inspired the community of practice to expand and share new ideas and practices among school members.

Since Ocean Elementary is a particular school with its own context, these recommendations are based upon the two-year successful integration of media production. The uniqueness of the research setting is its strength as well as a limitation.

Strengths and Limitations

As I was choosing to explore the use of media production at Ocean Elementary, I knew that the unique experience of the teachers would be difficult to replicate in other settings, but at the same time, it offered many powerful insights that I was about to discover. During this study, I explored the literature of digital technology integration to find that while there are many theories, none of them looks at media literacy and even more specifically at media production. What is more, I did

not find a description of how media production works in the context of a whole elementary public school, nor did I find how professional development in media production should be structured. The literature on media production education has little to say about how to bridge the gap between research on the benefits of media production and the daily practice of public school teachers.

While looking for the connection between Maslow's hierarchy of needs and the needs of classroom teachers, I found two citations from the 1990s that connected Maslow with technology integration. One was a dissertation about implementing a word processor (Bichelmeyer, 1991) and the other was an article for professional development in a journal of ISTE (Bailey & Pownell, 1998). Similarly, I found only one study that connected self-determination to technology integration. But this dissertation from Dublin City University (Butler, 2004) omitted the work of Deci and Ryan's (1985) self-determination. The researcher did not analyze the teachers' needs using the three main constructs of relatedness, mastery, and autonomy.

In my research, this multiple case study looks at particular adaptations of four teachers in response to a professional development initiative in media production. When I started, I was trying to understand if media production could be successfully integrated into an elementary classroom. As I started to observe and interview, I realized that not only was it possible, but that the teachers experienced a transformation in their sense of professional identity as they experimented with media production. For this reason, my research helps various stakeholders to visualize how media production cannot only benefit the students and the teachers but the whole school culture and the community. By giving specific examples and triangulating

evidence from five different sources, readers get a deep understanding of the school culture that promoted media production to cultivate teacher leadership.

This research has some main limitations resulting from the particularities of the context. Qualitative research in general suffers from the limitations of generalizability. In addition, there are threats to the internal validity, as I explore the teachers whom I gave professional development to. Finally, the limited scope and focusing solely on four teachers is a limitation to be considered as well. The first limitation is the uniqueness of the study settings. Ocean Elementary is an affluent suburban school. Though the administration complains of budget cuts, every teacher had a Promethean board and at least three desktop computers; the school had two laptop carts, two iPads carts, and a computer room; and the library had five desktop computers with professional editing software and a green-screen TV studio. If that is not enough, the support team in the academic year of 2014-2015 had an experienced literacy coach with more than fifteen years working in adult education and a media professional serving as the school's library media specialist. The partnership with the Media Education Lab enhanced the digital literacy initiative and moved towards a goal of reaching the whole district. This is why I chose this very unique setting. The findings reported here are unique to this context, and the recommendation might not be applicable to every community. In order to address this limitation, I used the concept of transferability (Fraenkel et al., 2012; Merriam, 2001; Patton, 2015). The reader can use the most relevant insights from the study to apply to their own settings.

A second limitation is research positionality. My dual identity as both a provider of professional development and a researcher is an inevitable limitation of

this study. Supporting the teachers' integration of media production was the primary reason why I was able to get access to the school faculty, and there was a time during the data-collection process when some teachers would see me as the tech guy or the curriculum design consultant. Truthfully, I did play both those roles in some cases. Teachers might have developed some activities just to please me, although in every case where this may have occurred, the activities they developed later turned out to benefit both teachers and students. In one case, I was observing a math intervention. Instead of doing their regular activities, Abbie and Grace wanted to plan a screencast of their problem-solving. Later on that semester, the use of screencasts for problem-solving became a way for students to verbalize their procedural thinking and a tool for faculty to monitor students learning, as I showed in Chapter 6.

A third limitation of this research concerns my decisions to narrow the scope of the research to examine the work of four teachers and their support network. From the beginning, I knew that I would interview the principal only once to provide context but not to examine her own role and contribution to the whole school integration initiative. Though I wanted to have different teachers and staff members participate, I limited the number of case studies to eight people in order to show multiple points of view and connections between team members. I was limited by the decisions made by faculty who volunteered. This study has little to say about non-participants in the digital literacy initiative. As a part of the school ecosystem, it would have been valuable to hear about the perspectives and unmet needs of the non-participating teachers. Knowing that some teachers would not follow through, I recruited 12 participants for the study and ultimately reported findings from nine of

them, including the principal. When I began the project, I was looking to tell the story of both the support team and the teachers they were supporting.

I chose to focus on the classroom teachers for three reasons. During the data analysis phase, the sheer quantity of data was overwhelming, and therefore, I decided to focus only on the classroom teachers, looking peripherally at the support provided by the specialists. My second reason for focusing on the classroom teachers was rooted in my inability to examine the effectiveness of media production on student learning outcomes, a topic I still maintain a deep interest in. Finally, I focused on classroom teachers' needs because of my awareness that the socio-emotional needs of teachers were understudied as compared to the needs of specialists. All of the literature on job-embedded professional development assumed what teachers need. By choosing an emic research design to give a voice to the educators, I was able to put the elementary educators at the center of the study. Had I placed the support team members at the center of the study, the dissertation findings would have shifted to focus on the needs of those individuals.

This dissertation answered three research questions: (a) Why do some elementary school teachers practice media production with their students? (b) How do these teachers differ in their media production practices in their classes? and (c) What is needed to promote the variety of media production practices in elementary education? Beyond the scope of this study were the questions: Who decided to integrate media production? When and where should media production be used? Does media production suit every teacher? Are there times that media production is not the

appropriate activity? And are there educational settings that are more proper for media production than others?

Recommendations for Future Study

Future research should try to answer the many questions that remain unanswered. Since the research has focused only on three case studies, a larger scale study using the theoretical model of the self-determined digital literacy mentor with a more diverse population who do not have the amount of support an access to technology as Ocean Elementary has. Studying different educational contexts might provide a deeper insight on the different motivations, practices, and support for teachers to integrate media production. This research is a qualitative multiple case study design, and the collection of the data happened after the interventions. Aside from the survey data that was collected during the intervention and after it, the study does not show a quantitative measure of pre- and post-intervention of integrating media production. Creating an experiment with a control group would add empirical data to test the benefits of the model where one group go through the different stages while other group do not. Having data from an experiment would allow policy makers to use it to advance the integration of media production and allocate funding for it.

Some policy analysts believe that funding for integrating media production into the K-12 setting will come only when there is an empirical basis to show the benefit for students' learning. The opportunities for students who practice media production have not been researched as a longitudinal study. The current anecdotal case studies in the literature of media production education provided particular examples that were contextualized and not always transferable. This research

describes how teachers witness the power of media production as it helped students who could not express themselves in writing, speaking, or drawing to have a powerful process to articulate their thinking and share it digitally with peers, teachers, administrators, and parents. Future research should look at what kinds of students benefit from media production and what kinds do not. Taking a progressive educational setting such as Ocean Elementary and examining the effects of making media during their five years at the school should give us insights into the advantage that the teachers reported in this research, but students have not been examined.

Besides testing the model in a qualitative, larger-scale experiment and evaluating the outcomes for students, there are smaller-scale and more doable research projects that can be done, such as looking at resisting teachers. Exploring how the model fails to be integrated can help us understand how to better address the resistance to media production integration. The digital learning profile (Hobbs & Tuzel, 2015) was not tested with resisting teachers but with teachers who incorporated digital media and had either protectionist approaches or empowering approaches. Learning the trepidations and barriers for teachers who do not integrate media production can teach us a lot about designing appropriate professional development. While I tried to answer why, how, and what is needed to implement media production in an elementary school, the questions regarding where, when, and who still need to be explored. Furthermore, the effectiveness of the self-determination model should be tested in different contexts while the facilitators have the model in mind. This research showcased a successful integration of media production and connected it to teachers' transformation to become digital literacy mentors: a process

that should be explored further to advance scholarship and practice on media production for education.

Concluding Thoughts

In my discussion, I argue that in order to successfully implement media production, we need to give teachers the autonomy (a) to choose whether they want to implement it, (b) to engage teachers' relatedness to media production by being heard and being part of a collaboration, (c) to practice media production skills to feel competent, and (d) to be reassured that playfulness is educational and student-led activity benefits both the teacher and the students. This is not a quick process, nor does it ever end. Becoming a digital literacy mentor is a life journey to become a more attentive educator. It values the students' culture by acknowledging and incorporating the students' media use and their favorite popular culture. Being a digital literacy mentor is also seeing the students as humans who are curious to learn and want to take control over their growth. With the increasing use of media production that children are practicing outside of school, we can integrate it as a learning experience. This would not only increase students' engagement but also would bring new dimensions to their development.

The Ocean Elementary community acknowledged the responsibility of educators to step-up to the current use of media production and model and empower students to be socially responsible and digital and media literate. Becoming a digital literacy mentor is not just an option for affluent and suburban schools. It is the duty of each of our teachers to familiarize themselves with the students' digital media use.

Developing mentorship in the classroom will prepare our students to be contributing citizens in the digital era.

APPENDICES

Appendix A – Teacher Interview Questions

An individual interview protocol for teachers on media production use in the classroom

No	Topic	Questions	
1.	Opening	1. Tell me a little bit about your teaching experience. When and why you became a teacher?	All
	Informative	2. What is the role of media in your class?	Motivation & Practice
		3. What is your definition of media production?	Motivation
		4. Why would you use a media production activity in your classes?	Motivation
		5. What do you need to make it happen? In regard to resources and support.	Support
	Reflection	6. On your digital learning profile you got ... as your top three. What do you think about that?	Motivation
	Ending questions	7. Is there anything that we missed? Is there anything that you wanted to say and did not have a chance to say?	
2.	Opening statement	Media production is mainly perceived as video production, however it is also any composition using mediated communication. Media Production can be writing on a paper or online, composing a song, designing a PPT, production a video, taking a picture, etc.	
	Opening	1. Which of all of those is emphasized in your classroom? Why?	Motivation
	Explorative	2. How do you use media production in your classrooms?	Practice
		3. When are you using media production in your classroom?	Practice
		4. How do students benefit from this approach?	Motivations
		5. What is your biggest challenge of using media	Support

		production in class?	
		6. What kind of techniques did you use to overcome the challenges of media production in your class?	Practice
		7. Some teacher stir away from MP because of their fears and concerns of what can go wrong. What are your thoughts about that?	Practice
		8. Have you had any experience challenges that did not go as planned?	Practice
	Ending questions	9. Is there anything that we missed? Is there anything that you wanted to say and did not have a chance to say?	
3.	Opening	1. How did it feel to be observed and videotaped for the research?	Practice
	Reflective	2. What did you learn from our interviews and observations?	Practice
		3. What is your relationship with ... (name of the support team member)?	Context
	Verifying	4. From my initial analysis, I observed that you used... What do you think about it? Do you agree or disagree? Why?	Practice
	Reflective	5. Looking back at your practice of media production, what would you like to do differently? Why?	Practice
	Verifying	6. I saw ... (name of support team member) helping you with... is it right? What else was needed to support your media production implementations?	Support
	Reflective	7. What more can be done to better support your media production implementations?	Support
	Ending questions	8. Is there anything that we missed? Is there anything that you wanted to say and did not have a chance to say?	Support

Note. Structure of the questioning route taken from Seidman (2006)

Appendix B – Support Team Member Interview Questions

An individual interview protocol for support team member on media production in class

No	Topic	Questions	
1.	Opening	1. Tell me a little bit about your experience in becoming part of the school professional development. When and why you became a support team member?	All
	Informative	2. What is the role of media in your teachers' support? 3. What is your definition of media production? 4. Why would teachers use media production activity in their classes? 5. What do you need to do make to support the teachers practicing media production?	Motivation & Practice Motivation Motivation Support
	Reflection	6. On your digital learning profile you got ... as your top three. What do you think about that?	Motivation
	Ending questions	7. Is there anything that we missed? Is there anything that you wanted to say and did not have a chance to say?	
2.	Opening Statement	Media production is mainly perceived as video production, however it is also any composition using mediated communication. Media Production can be writing on a paper or online, composing a song, designing a PPT, production a video, taking a picture, etc.	
	Opening	1. Which of all of those is emphasized in your classroom? Why?	Motivation
	Explorative	2. How do you use media production in your classrooms and professional development sessions? 3. When are you using media production in your classroom and professional development sessions? 4. How do students benefits from this approach? 5. What is your biggest challenge of using media	Practice Practice Motivations Support

		production in class?	
		6. What kind of techniques did you use to teach teachers to overcome the challenges of media production in their class?	Practice
		7. Some teacher stir away from MP because of their fears and concerns of what can go wrong. What are your thoughts about that?	Practice
		8. Have you had any experience challenges that did not go as planned?	Practice
	Ending questions	9. Is there anything that we missed? Is there anything that you wanted to say and did not have a chance to say?	
3.	Opening	1. How did it feel to be observed and videotaped for the research?	Practice
	Reflective	2. What did you learn from our interviews and observations?	Practice
		3. What is your relationship with ... (name of teachers they support)?	Context
	Verifying	4. From my initial analysis, I observed that you used... What do you think about it? Do you agree or disagree? Why?	Practice
		5. I saw you supporting ... (name of the teacher) by doing ... is it correct? What else did you need to do to support the teachers you worked with implementing media production?	Practice
	Reflective	6. Looking back at your support, what would you like to do differently? Why?	Support
		7. What more can be done to better support your media production implementations?	Support
	Ending questions	8. Is there anything that we missed? Is there anything that you wanted to say and did not have a chance to say?	Support

Note. Structure of the questioning route taken from Seidman (2006)

Appendix C – Focus Group Questions

A questioning route for focus group for supporting media production use in the classroom

Section	Questions	
Opening	1. How do you know each other?	Context
Introductory	2. When was the first time you worked together on media production?	Context
Transition	3. Could you describe to me how do you work together?	Support
Key questions	5. What teachers need from you to successfully use media production in their class?	Support
	6. What other resources beside professional development are needed to support media production implementation in the classroom?	Support
	7. How would you define each other use of media production?	Practice
	8. Why do you think other teachers are using media production?	Motivation
Ending questions	9. If you had a change to give advice to other support team members, what advice would you give?	Support
	10. We want you to help us understand why teachers should use media production in their classes. Is there anything that we missed? Is there anything that you wanted to say and did not have a chance to say?	

Note. Structure of the questioning route taken from Krueger & Casey, 2009.

Appendix D – School Principal Interview Questions

A structured interview with the school principal about media production use in school

	Question
Definition	Please define media production
Use	To your estimation how many teachers are using media production in your classroom?
Motivation	Why is it important to incorporate media production in education?
Motivation	Why is NES encouraging the implementation of media production?
Support	How are you as principal encouraging the use of media production in the school?
Support	What is the role of support staff to support teachers who incorporate media production?
Challenges	Can you imagine a situation in which media production can challenge the school or community values?
Challenges	Is there a place in NES to create and discuss popular culture?
Challenges	How issues of privacy can challenge media production practice?
Challenges	Why is it problematic to have students expressing themselves?
Challenges	Some principals are concern about these issues. What are your thoughts?
Practice	How are teachers using media production in the classroom?
Context	How do parents react to the use of media production in school?

Context	Why is it important for NES to have media production practices?
Motivations	Why some teachers do not want to incorporate media production in their classes?
Support	How can you as principal encourage them to implement media production in their classrooms?

Note. Structure of the questioning route taken from Seidman (2006)

Appendix E - Digital Learning Profile Survey

Digital Learning Motivation Profile

	Questions	Label	Protect- Empower
1	Students need to ask better 'how' and 'why' questions about the media they	Demystifier	Protect
2	I always want my students to pull back the curtain to understand how media is constructed.	Demystifier	Protect
3	Students have to be mindful of the way things are bought and sold.	Watchdog	Protect
4	Students need a wakeup call about the economics of media and technology.	Watchdog	Protect
5	It's my job to help students examine how and why social institutions can be unjust and inequitable.	Activist	Protect
6	My classroom is a place where students learn how to improve their communities and the world.	Activist	Protect
7	I worry that technology is sometimes used as 'bells and whistles' that detract from academic content and standards.	Professor	Protect
8	If media and technology are not advancing specific learning outcomes, they should not be used in the classroom.	Professor	Protect

9	I have high expectations of the professionalism of my students' work.	Professional	Protect
10	If my students do not use the conventions of professional media, they won't be taken seriously as an author or artist.	Professional	Protect
11	Students who are flexible to lots of different ways of communicating online and off-line are better off than students who are not.	Teacher 2.0	Protect
12	If students don't participate and develop interests online outside of school, they will fall behind those who do.	Teacher 2.0	Protect
13	I worry that students aren't being given enough opportunity to experiment with educational technology.	Techie	Protect
14	Schools needs to stay up to date with the latest educational technology to succeed.	Techie	Protect
15	I want my students to feel comfortable confiding in me even if they don't feel comfortable telling others.	Spirit Guide	Protect
16	I worry about how media affects the social and emotional well-being of children and young people.	Spirit Guide	Protect
17	I worry that students are not given the opportunity to really speak their mind in school.	Motivator	Protect

18	Students who are not engaged, motivated and connected to school culture are at risk of failure.	Motivator	Protect
19	Being up to date on popular culture is important for getting kids engaged in learning.	Trendsetter	Protect
20	I worry that schools don't take students' interests (in popular culture like movies, TV shows, music, and celebrities) seriously enough.	Trendsetter	Protect
21	Students aren't given enough opportunities to find information that's off the beaten path of mainstream media and ideas.	Alt	Protect
22	Schools should use alternative resources and technology, like open-source software and independent publications, to offer young people a well-rounded education.	Alt	Protect
23	Children and young people often live in very narrow social worlds without much exposure to the arts, sciences and culture.	Tastemaker	Protect
24	Students' future success will depend on their ability to have broad knowledge of both classical and contemporary sources.	Tastemaker	Protect
25	Students should know how all information and knowledge is constructed.	Demystifier	Empower

26	Learning to ask good questions needs to be a central goal of education.	Demystifier	Empower
27	Students need to 'talk back' to companies and individuals who own and control media.	Watchdog	Empower
28	It's my job to empower students by making them aware of how economics and institutions affect the media in their everyday lives.	Watchdog	Empower
29	Civic engagement should be activated by the use of media and technology in the classroom.	Activist	Empower
30	Students should contribute to media projects that engage them directly in political and social issues.	Activist	Empower
31	I have a deep passion for helping students master academic content, ideas and standards.	Professor	Empower
32	Multimedia presentations, engaging websites, videos, and educational technology help me address the core academic content and skills that students need to master.	Professor	Empower
33	I would like to be seen as a 'go-to' media professional in my school.	Professional	Empower
34	I want my students to be competent in their future careers as media professionals.	Professional	Empower

35	Classroom use of social media tools like Facebook and Twitter can help students learn new skills, participate in culture, and share ideas.	Teacher 2.0	Empower
36	I want my students to share their stories by using media and technology that connects them to the rest of the world.	Teacher 2.0	Empower
37	I have a passionate curiosity about new technology tools.	Techie	Empower
38	Using technology in the classroom helps me engage students in learning.	Techie	Empower
39	Talking about media should help students feel better about themselves and get through the highs and lows in life.	Spirit Guide	Empower
40	When I use media or technology in the classroom, I listen and notice what my students think and feel about it.	Spirit Guide	Empower
41	Young people need to be inspired to be creative in any way that they see fit.	Motivator	Empower
42	I am a catalyst for my students' creative energy and help them be the best they can be.	Motivator	Empower
43	I'm smart about pop culture and curious about kid culture.	Trendsetter	Empower

44	I want school culture to meet kids where they live by engaging with their popular culture.	Trendsetter	Empower
45	It's important for students to have deep exposure to alternative information sources and points of view.	Alt	Empower
46	I encourage and support students to start alternative clubs or publications in print or online.	Alt	Empower
47	I want my students to take a deep dive into important texts that deepen their understanding of history, art, the sciences, and society.	Tastemaker	Empower
48	Students are empowered when they figure out how to connect classical texts and literature to contemporary life.	Tastemaker	Empower

Note. The online survey can be seen at <http://quiz.powerfulvoicesforkids.com/>

Appendix F - 2010 Census Interactive Population - Ocean Town

Population

Total Population	3,409
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Housing Status (in housing units unless noted)

Total	2,215
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Occupied	1,633
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Owner-occupied	839
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Population in owner-occupied (number of individuals)	1,855
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Renter-occupied	794
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Population in renter-occupied (number of individuals)	1,524
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Households with individuals under 18	236
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Vacant	582
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Vacant: for rent	42
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Vacant: for sale	92
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Population by Sex/Age

Male	1,572
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Female	1,837
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Under 18	407
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18 & over	3,002
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20 - 24	588
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25 – 34	286
35 – 49	512
50 – 64	767
65 & over	765

Population by Ethnicity

Hispanic or Latino	51
Non Hispanic or Latino	3,358

Population by Race

White	3,243
African American	40
Asian	35
American Indian and Alaska Native	44
Native Hawaiian and Pacific Islander	2
Other	13
Identified by two or more	32

Note. U.S. Census Bureau. (December 4, 2014). 2010 census interactive population search. Retrieved from <http://www.census.gov/2010census/popmap/ipmtext.php>

Appendix G - Proficiency Score, 2012-13 NECAP Scores

Reading	Enrolled	NT Approved	NT Other	Tested	Achievement Level								
	N	N	N	N	Level 4		Level 3		Level 2		Level 1		Mean Score
					N	%	N	%	N	%	N	%	
Narragansett Elementary	208	3	1	204	76	37	105	51	15	7	8	4	
Beginning of Grade 3	100	1	1	98	33	34	57	58	6	6	2	2	353
Beginning of Grade 4	108	2	0	106	43	41	48	45	9	8	6	6	452

Mathematics	Enrolled	NT Approved	NT Other	Tested	Achievement Level								
	N	N	N	N	Level 4		Level 3		Level 2		Level 1		Mean Score
					N	%	N	%	N	%	N	%	
Narragansett Elementary	208	3	1	204	85	42	79	39	26	13	14	7	
Beginning of Grade 3	100	2	1	97	45	46	34	35	14	14	4	4	350
Beginning of Grade 4	108	1	0	107	40	37	45	42	12	11	10	9	450

State Department of Education. (2013). Ocean Elementary Proficiency Score, 2012-13. New England Common Assessment Program (NECAP). Retrieved from <http://iservices.measuredprogress.org/ContractProgram.aspx?ProgramID=33>

Appendix H - Ocean Elementary School Demographics

Overview

- ✓ The student population of 523 students has stayed relatively flat over five years.
- ✓ The teacher population of 45 teachers has stayed relatively flat over five years.

Grades Offered	Grades PK-4
Total Students	<p>523 students</p> <p>Ocean Elementary School</p>
Gender %	52% Male / 48%Female
Total Classroom Teachers	<p>45 teachers</p> <p>Ocean Elementary School</p>
Students by Grade	<p>Students</p>

School Comparison

- ✓ The student:teacher ratio of 12:1 has stayed the same over five years.
- ✓ The school's diversity score of 0.19 is less than the [state average of 0.51](#). The school's diversity has stayed relatively flat over five years.

	This School	State School Average
Student : Teacher Ratio	12:1	12:1
American Indian	2%	1%
Asian	n/a	3%
Hispanic	2%	22%
Black	1%	8%
White	90%	64%
All Ethnic Groups		
Diversity Score	0.19	0.51
Eligible for Free Lunch	4%	38%
Eligible for Reduced Lunch	4%	6%

Appendix I – List of Application for Education

Application	Icon	Available	Description
Animoto		All	Video slideshows, where you can add the pictures, videos, music, and titles. The online software edits your media into a video.
EduBlog		Web-based	An educational version of the web design platform WordPress. It allows a secure blogging site for the students using Wordpress themes.
Explain Everything		App Store	Interactive screencasting whiteboard app that allow you to create and share ideas as videos and more with easy-to-use tools and integrations of any type of media.
FlipGrid		Web-based App Store	Grids of questions or topics using text or video that you can share with whomever you like. Your audience then responds with recorded videos.
Glogster		Web-based	Online multimedia posters platform where you can combine all kinds of media on one page and create fantastic posters that really tell the story.
Haiku Deck		Web-based App Store	Online presentation software that allow to design slides with pictures and titles easily.
Padlet		All	A blank page where you can put any content. It works like a sheet of paper where you can put anything (images, videos, documents, text) anywhere, from any device (pcs, tablets, phones), together with anyone.
PicCollage		All	Online collage-maker that allow you to combine photos, YouTube videos, fonts, stickers, and cutouts to create digital poster with your on a mobile device.
Prezi		All	Online platform to create interactive and video-based presentation that allow you to add any media.
Screencast-O-Matic		Computer	Screencasting web-based software to capture your screen, your voice, and your webcam.
SeeSaw		All	Online library for teachers and students to securely curate their media materials. It allows to connects with different apps and share selectively with other people such as parents.
Shadow Puppet		Apple Store	Easy to create costumed videos to tell a story, explain an idea, or send a personalized message and share it on different platforms. The application let you combine photos and video clips with your voice and favorite song. You can also draw on screen, add emoji stickers, zoom, and pan.
Skype		All	Video Conference software for talking across the world. Call, share, message and express yourself also with Mojis.
Stop Motion Studio		App Store	Application that allow you to take picture in a series to create a stop motion animation with your Apple mobile device.

ThinkLink		Web-Based	Interactive media platform that empowers publishers, educators, brands, and bloggers to create more engaging content by adding rich media links to photos and videos. You can keep track of how people interact with your content as it spreads across the web.
TodaysMeet		Web-Based	Backchannel chat platform for classroom teachers and learners with no registration.
Titenpad		Web-based	Collaborative word processor that allow you to work on one document simultaneously
Videolicious		App Store	Automatic video editing application that allows you to put videos, pictures and titles and generate a finished video.
VoiceThread		All	Digital conversations tool that allow you to put a file, a video or a picture in the middle of the screen and have a audio, or video conversation to create a thread of dialogue between users.
Wonderpolis		Web-based	The website publishes a wonder each day for parents and kids to share — answers to burning questions and it is aligned with the CCSS.

Appendix J – Timeframe of PD and research At Ocean Elementary

Date	Activity	Participants	Research tools
July 2013	Summer Institute in Digital literacy	George	
Fall Semester	Book Club	Led by Charlotte with interested teachers	
Spring Semester	Media Literacy Workshop after school	Yonty	
March 2014	PD day – Dr. Hobbs Keynote	Whole District	
June 2014	Reflection and wishes of interest group with Yonty		
July 2014	Summer Institute in Digital Literacy	Charlotte, Sarah, George	
August 2014	Superintended sign on digital literacy initiative	Dr. Hobbs	
10.01.14	Yonty presentation to Faculty meeting	All faculty at Ocean Elementary	Motivation Survey
Fall Semester	Yonty starting to provide support three days a week at ocean elementary		
10.07.14	Leadership meeting	Dr. Hobbs, Superintendent, Diana, Charlotte, Grace, the other district administrative, and Yonty	
11.07.14	Leadership meeting	Dr. Hobbs, Superintendent, Diana, Charlotte, Grace, the other district administrative, and Yonty	
11.13.14	Catalyst Teachers meeting	Dr. Hobbs, all s teachers, and Yonty	
12.10.14	DigiPlayground	Catalysts teachers, Dr. Hobbs, The Superintendent, and Yonty	
12.10.14	Catalyst Teachers meeting	Dr. Hobbs, all s teachers, and Yonty	
12.17.15	DigiPlayground	Catalysts teachers and Yonty	
01.07.15	Faculty Meeting	Tech use survey	Survey
01.09.15	Leadership meeting	Dr. Hobbs, Superintendent, Diana, Charlotte, Grace, the other district administrative, and Yonty	
01.14.15	DigiPlayground	Catalysts teachers and Yonty	
01.21.15	DigiPlayground	Catalysts teachers and Yonty	
02.04.15	Faculty Metting	Yonty introduces research	Consent forms
02.05.15	Catalyst Teachers meeting	Dr. Hobbs, all catalysts	

		teahcers, and Yonty	
February 2015	PARCC Testing		
03.04.15	Leadership meeting	Dr. Hobbs, Superintendent, Diana, Charlotte, Grace, the other district administrative, and Yonty	
03.05.15	Catalyst Teacher meeting	Dr. Hobbs, all catalysts teahcers, and Yonty	
03.06.15	PD Day Catalyst Teacher produce the UnConference event for all faculty	All faculty	
March	Interviews		First interviews + Digital learning profile survey
March-May	Observations in Class		Observations
April 2015	PARCC Testing		
05.04.15	Last leadership meeting	Dr. Hobbs, Superintendent, Diana, Charlotte, Grace, the other district administrative, and Yonty	
May 2015	Individuals interviews & focus groups		Second interviews & focus groups
June 2015	Third interviews		Third Interviews
July 2015	Summer Institute in Digital Literacy	Isabella presentation, Dr. Hobbs Keynote, Yonty presentations.	

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