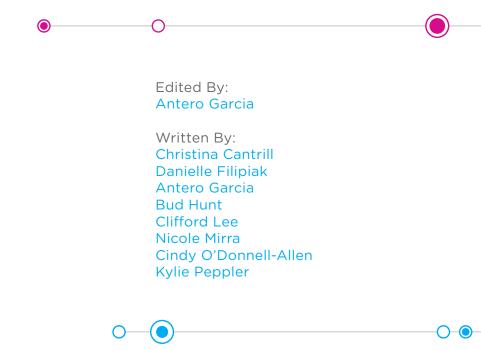
TEACHING IN THE CONNECTED LEARNING CLASSROOM

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The Digital Media + Learning Research Hub Report Series on Connected Learning



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Digital Media + Learning Research Hub

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FOREWORD

Kylie Peppler, Indiana University

In common attempts to standardize what and how teaching is conducted, we often fail to recognize the tremendous amount of innovation that educators bring to solving an array of challenges in today's classrooms. This volume highlights compelling firsthand counter-narratives from educators engaged in exactly this work, underscoring the fact that today's teachers have to design the classroom experience in ever-changing contexts in order to be successful.

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Educators have to fluidly adapt to constant interruptions, create new instructional materials, utilize new technologies, respond to the changing needs of their students, and wrestle with new policy movements and their implications for the classroom. All of this requires a tremendous amount of insight and commitment to the iterative design process on the part of the teacher and the classroom community.

This volume draws together narratives from an inspiring group of educators within the National Writing Project (NWP)—a collaborative network of instructors dedicated to enhancing student learning and effecting positive change—that contributes to our understanding of what "Digital Is" (DI). DI is a web community for practitioners with high levels of expertise and a deep commitment to engaging today's youth by fostering connections between their in- and out-of-school digital literacy practices. Furthermore, DI is about sharing experiences that offer visibility into the complexity of the everyday classroom, as well as the intelligence that the teaching profession demands.

What follows is not a how-to guide or a set of discrete tools, but a journey to rethink, iterate, and assess how we can make education more relevant to today's youth. The chapters in this volume represent a bold re-envisioning of what education can look like, as well as illustrate what it means to open the doors to youth culture and the promise that this work holds. While there are certainly similarities across these diverse narratives, the key is that they have taken a common set of design principles and applied them to their particular educational context.

Moreover, these examples aren't your typical approaches to the classroom; these educators are talking about integrating design principles into their living practice derived from cutting-edge research. We know from this research that forging learning opportunities between academic pursuits, youth's digital interests, and peer culture is not only possible, but positions youth to adapt and thrive under the ever-shifting demands of the twenty-first century. We refer to this approach as the theory and practice of "connected learning," which offers a set of design principles—further articulated by this group of educators—for how to meet the needs of students seeking coherence across the boundaries of school, out-of-school, and today's workplace. Taken together, these narratives can be considered "working examples" that serve as models for how educators can leverage connected learning principles in making context-dependent decisions to better support their learners.

As a designer and researcher of new technologies to promote creative learning, I personally took this journey as I co-designed a new digital media curriculum with educators from the National Writing Project. Though we started with a set of exciting new digital tools, we ended up radically re-designing almost everything about the curriculum as the teachers embarked in the co-design process—revamping classroom activities, rethinking current theories of systems thinking, and aligning our designs to promote high-quality teaching and learning. I came to the table with a set of tools to use but left with an experience of what it meant to engage in the design process as an educator.

If you, too, are inspired to take this journey, you will have to commit to being a designer-in-context. The benefits of doing so are manifold: You can expect to be more actively engaged in your work, and you also can expect more actively engaged students as they help to shape the resulting designs. When we, as educators, begin to see ourselves as designers, we immediately reposition ourselves as active agents of change in today's educational environment. Moreover, given the continued failure of retaining non-dominant youth in the schooling system, it behooves educators to explore how connected learning practices might exemplify a particularly important avenue for learning and equity in the twenty-first century.

TEACHER AGENCY AND CONNECTED LEARNING

Antero Garcia, Colorado State University

Classroom of Today

Classrooms and schools today look remarkably like classrooms and schools of the past. The factory model of schools in the United States—with desks and bells and Carnegie units and panopticon-like designs—is alive and well as we continue deep into the second decade of the twenty-first century. Sure, there are updates: The Apple IIe computers that allowed me to play *The Oregon Trail* as a child of the '80s has been replaced by slimmer and shinier brethren, and the boards in front of the classroom have gone from black to white to digitally "smart." But in nearly all respects, the classrooms and how they function today look strikingly the same as they have for decades. This stagnancy would not be much of a problem if the rest of society also remained in stasis. However, that's simply not the case.

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An Environment of Connected Learning

Kids today are learning, engaging, and producing in richly productive and collaborative ways. Media products can now function as building blocks for unique and personalized productions. From discarded cardboard transformed into cityscapes and vehicles to taking one's favorite book characters and rewriting new adventures for them, learning and production are centered around youth interests in many out-of-school contexts. And these aren't *new* dispositions; the previous two examples are deliberately highlighting things kids are doing with or without the use of computers. What is new, though, is the ways youth expertise can be networked, amplified, and pinpointed globally with new media tools.

These new forms of engagement that we see shaping how youth learn and connect comprise what a research team spearheaded by Mimi Ito call "connected learning." In their 2013 report, *Connected Learning: An Agenda for Research and Design*, Ito et al. write that connected learning is:

socially embedded, interest-driven, and oriented toward educational, economic, or political opportunity. Connected learning is realized when a young person pursues a personal interest or passion with the support of friends and caring adults, and is in turn able to link this learning and interest to academic achievement, career possibilities, or civic engagement.

And while youth learning is at the center of connected learning, this book makes the case that the framework presented in *Connected Learning* functions as a set of key design principles for today's teachers to consider. While connected learning principles are seen flourishing in out-of-school spaces, there are fewer articulations of how connected learning can help inspire and shift existing teacher practices.

Connected learning transforms classroom spaces and shifts expectations of expertise and content delivery. Instead of following traditional, "banking" models of education (Freire 1970), teachers, too, are learners in connected learning environments. I want to underscore that in this context then, the principles of connected learning (e.g., it is interest-driven and collaborative) apply to

teachers, as well as their students. This collection, *Teaching in the Connected Learning Classroom*, brings to life the possibilities of connected learning as it is enacted daily in schools across the country.

The Role of Teachers in the Twenty-First Century

This is a particularly frenetic time for teachers: An increased focus on how to measure and assess the effectiveness of educators and what they do in their classrooms is sweeping educational policy. Meanwhile, increased focus on the value of out-of-school learning leads the charge for what is being scrutinized as youth education. As a teacher who spent eight years in the high-school classroom before moving into my current role of working with pre-service teachers, I am both excited and cautious about the new turns the teaching profession is taking. How are connected learning principles changing what teachers can and need to do within their classrooms? While I started this book with the note that classrooms look fundamentally the same despite the fact that society is in constant flux, I think a lot of educators are enthused about not only catching up to these cultural advances, but also pioneering much needed new forms of learning within our classrooms. As such, policymakers and researchers collectively need to take a hard look at what we are expecting teachers to do and how we are supporting them in doing it. Not simply in terms of cultivating principles of connected learning in our schools today, but in nearly every aspect of teaching, today's education labor force is constrained, silenced, and stifled.

Connected learning within classrooms is an approach to embolden and revolutionize today's teaching labor force. Today, the rhetoric about teachers often focuses on what they need to be doing, including the tests they should administer and how they should interpret and adhere to nationalized standards. Today's media portray educators as laborers unable to make creative and context-dependent decisions within their own classrooms. I believe connected learning principles can provide a vocabulary for teachers to reclaim agency over what and how we best meet the individual needs of students in our classrooms. With learners as the focus, teachers can rely on connected learning as a way to pull back the curtain on how learning happens in schools and agitate the possibilities of classrooms today.

Considering these possibilities, teachers today are environmental designers: We craft the educational ecosystems in which we mutually learn and build with students during the hours of 9 to 3. In my experience, one of the most important aspects of teaching is the flexibility to adapt and change with the context of the classroom. Individual student needs, a different bell schedule, or a local news event that may need debriefing within a classroom are all part of the regularly occurring factors that required me to change the plans I had developed for classrooms. I want to share the challenges I faced and note that great teachers today are fundamentally focused on rethinking their practice and reshaping the narratives of what happens as classroom learning.

The Voices in this Book: More than Best Practices

In the spring of 2013, one of the classes I was teaching at Colorado State University expressed frustration with the direction of the course. E401, "Teaching Reading," is an upper-division English course for future teachers focused on exactly what you would imagine for a class called "Teaching Reading." The frustration stemmed from the fact that I had designed the course to be a constructive one: We would collectively define culturally dependent terms like "literacy" and "reading" and, over the course of the semester, develop a framework for adapting teaching

practices depending on the environments where these teachers would eventually find themselves. The students, on the other hand, rightfully pointed out that I wasn't showing them the "how" implied in a course called "Teaching Reading." (For a continued look at how this class progressed, see the case study written by a couple of my students in Chapter Two.) Like the design of that class, this book is not one full of how-tos. It is a book that highlights *why*: why educators can adopt a connected learning framework to help meet the needs of their students in their individual contexts. This is purposeful in helping illustrate myriad examples for readers that may not currently spend time within classrooms, as well as in sparking creativity for educators.

Typically, publications about or for teachers highlight "best practices." The buzzword-driven form of highlighting a superior approach, to me, ignores the cultural contexts in which teacher practices are developed. The best practice for my classroom is going to be different both from a classroom anywhere else and from my classroom a year down the road. Context drives practice. As such, this is not a how-to guide for connected learning or a collection of lesson plans. The pages that follow are, instead, meant to spur dialogue about how classroom practice can change and inspire educators to seek new pedagogical pathways forward.

Each chapter of this book is anchored by three case studies of how connected learning unfolds in classrooms across disciplines and age levels. In culling together the incredible corpus of work here, the curators of the six chapters of this book—Danielle Filipiak, Bud Hunt, Clifford Lee, Nicole Mirra, Cindy O'Donnell-Allen, and I—have worked to emphasize the intentionality of the educators as it emerges from their particular teaching contexts. The documentary film project of a kindergarten and first-grade teacher (Lacy Manship in Chapter Two) and the interactive fiction activities of a high school educator (Jason Sellers in Chapter Four) both speak to the unique learning contexts to which these teachers adapted, including consideration of their students' cultural, social, geographical, and interest-driven backgrounds. The dozen-and-a-half case studies presented here offer disparate visions of connected learning that overlap and crisscross in delineating connected learning in schools. There is, as a result, a messy swath of *different* connected learning approaches rather than suggesting a linear approach to classroom pedagogy. What's more, it is important to recognize that though the six chapters of this book are separated by different foci within the connected learning framework, these, too, will overlap. As you read, consider the dialogue that emerges *across* these case studies.

Digital Is: Supporting Teacher Practice

The work shared throughout this book is based on timely examples of connected learning as current classroom teachers describe them in the online community, Digital Is (digitalis.nwp.org). With support from the MacArthur Foundation, the National Writing Project's Digital Is online space is more than a social network. A brief description of the purpose of Digital Is can be found on the site's "about" page:

As an emerging and open knowledge base created and curated by its community of members, Digital Is gathers resources, collections, reflections, inquiries, and stories about what it means to teach writing in our digital, interconnected world.

Promoting dialogue among current educators about transformative uses of technology in the classroom, Digital Is shares teacher inquiry, lessons, and teaching samples from across the country. Leveraged under a Creative Commons license, the work on Digital Is can be shared, remixed, and transformed in various forms and contexts. Work in a ninth-grade English classroom may inform

innovation in a third-grade classroom and in pre-service teacher seminars at the university level. Instead of instructional considerations stemming from national policy, Digital Is promotes democratic teacher voices to support a professionally capable and resilient generation of educators.

As someone who continues to benefit greatly from the insights and expertise of the Digital Is community, I shaped this book to build on the existing conversations taking place in that online space. My goal is to offer meaningful illustrations of how teachers are already utilizing principles of connected learning to upheave traditional classroom structures and methods of engagement.

Though all of the case studies here initially started as resources on Digital Is, the authors were asked to highlight at least one of the connected learning principles their practice illustrates. These snapshots of classrooms are just that: They offer many brief conversation starters to further connected learning and to extend and complicate a new framework for classroom teachers.

Conclusion

Taken together, the six principles that are the basis for this book constitute the powerful possibilities of learning in schools today. However, just as they are a lynchpin within *Connected Learning: An Agenda for Research and Design*, the other curators of this work and I also focus on articulating how in-school connected learning depicts core values at the foundation of engagement: equity, social connection, and participation. Taken together, these core values, the expertise brought by students, and the adaptability of teachers bring to life the rich ecosystem in which educators are enmeshed today.

As I edited and read through the many examples in this book, I was struck by both the passion and the uncertainty that harmonize across these case studies. The future of the teaching profession is continually in flux, and the writing here depicts education in a time of uncertainty. I encourage readers to dive into this work and help further the conversation of classroom-based connected learning that the many contributors have instigated here. We look forward to tending the connected learning ecosystem with you.

CHAPTER ONE: INTEREST-DRIVEN LEARNING Student Identities and Passions as Gateways to Connected Learning

Nicole Mirra, University of California, Los Angeles

"Questioning why the schools in Los Angeles continue to receive only a small portion of billions of dollars is our duty. We need to research how the budget works and how we can direct more of the money coming in to the state toward urban education. Every single person should join this movement and make demands for the resources that we, urban youth, deserve. Because we need the opportunity to show the difference we can make in this world." – Peter, 16 years old

This quote from Peter, an eleventh grader from South Central Los Angeles, offers a powerful portrait of a young man who embodies the kinds of academic, social, and civic outcomes that parents, educators, and policymakers desire for all children – sophisticated analysis of a complex social issue, ability to jumpstart community dialogue, and commitment to informed and empowered public action. In this chapter, I argue that young people can best access these crucial outcomes when they are presented with opportunities to engage in what the *Connected Learn-ing* report dubs interest-driven learning, a concept based in the seemingly common-sense notion that students will gain more knowledge and skills at higher levels of intellectual rigor when their learning originates from issues or activities that innately captivate them.

Sadly, in an era of hyper-standardization and "racing to the top," commitment to this vision of learning is anything but common. Education in both formal and informal learning spaces seems less and less about meeting young people where they are as developing thinkers and more and more about forcibly transmitting into their minds enormous bodies of information that adults have deemed important for college and career readiness. The idea of developing learning experiences based on the interests of young people sounds strangely quaint in this educational context—a decadent "extra" that is shunted perhaps into extracurricular time, but more likely relegated to students' personal hours.

Nevertheless, I maintain that the power and possibility of tapping into students' passions are undeniable, particularly for students who often feel invisible or marginalized in mainstream educational discourse. Peter made the comment above in a scene from a digital documentary that he created as part of the Council of Youth Research, a university-school partnership program that engages young people across Los Angeles in researching issues that matter to them and taking action on their findings with the help of social media. Because of his interest in the lack of physical resources at his school in South Los Angeles, Peter was motivated to research state education financing and budgeting, gaining academic math and literacy skills in the process. He also came to identify as a researcher through this work, realizing the power of his voice and of being part of a community of youth striving for social justice. Finally, this work led him to see himself and his peers as powerful civic actors capable (and responsible for) making a difference in the world.

In keeping with the connected learning principles of participation, equity, and social connection, this interest-driven program *connected* Peter to a community of adults and peers who shared and supported his interest in school conditions; invited him to *participate* in shared experiences with others through both in-person and online interactions regarding his interest; and promoted *equity*

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not only through the research content on disparities in school funding, but also through his elevation to the status of a researcher on par with any adult expert.

Most educators understand instinctively the premise behind interest-driven learning—that young people are much more willing and eager to struggle with difficult academic concepts and skills if they are couched within topics or activities that get them fired up. This premise is grounded in sociocultural learning theory, which stresses that learning is not something that occurs at the level of the individual, but in the context of social interaction with others within a particular cultural and historical milieu (Vygotsky 1978). Sociocultural learning theorists argue that within all social interactions, learning is occurring at multiple, mutually constitutive levels—the personal, interpersonal, and institutional—and that this learning can be analyzed best as a process of shared activity (Rogoff 2003). In the case of connected learning, this shared activity is mediated through the use of technology, a uniquely powerful tool for amplifying and disseminating youth voice.

Despite this understanding of student interests, however, many educators continue to see them as diversions to help engage students in more "serious" content rather than crucial subjects of study in their own right. I argue that learning is inextricably linked to our identities and our relationships to others in our communities, and therefore, the interests that are explored in interestdriven learning represent much more than mere hobbies. Instead, they are integral elements of our identities that—when respected by educators as serious attempts to understand, grapple with, and take action in our world—have transformative educational and social power.

The three narratives in this section highlight the work of thoughtful, committed educators who offer honest and insightful depictions of the benefits and challenges of integrating interestdriven learning into formal and informal educational spaces. Christopher Working describes how his third-grade students' classroom adventures in blogging demonstrated the power of authentic writing. Chuck Jurich reminds us of the multimodal nature of writing in his analysis of an after-school filmmaking club for fourth- and fifth-grade students. And Meenoo Rami explores the counter-storytelling in which her high-school students engaged during English class to break down media stereotypes of young people.

These narratives remind us that children are complex beings who are not simply interested in childish things; instead, they are citizens in the making who offer sophisticated observations and critiques of the inequalities and injustices around them that educators need to honor and build upon. We have an urgent need to utilize students' voices and interests in order to help them develop expertise and agency. Interest-driven learning serves as a gateway to the other connected learning principles. Once a fire is lit under students, they easily pursue further opportunities to support peers, find shared purpose, network and produce with others, and connect their passions to academic achievement.

INTEREST-DRIVEN COMPOSITION: USING SOCIAL MEDIA IN A WRITING WORKSHOP

Christopher Working, Red Cedar Writing Project

It was an ordinary day during writing workshop, and as I was conferring with a third-grade student, Jumaane walked up beside me, a tattered paperback book in hand.

"Mr. Working, I'm trying to do a lead for my story like the one in this book, but I don't get it."

"I can show him!" Yuliana chimed in from across the group of desks, even before I had a chance to respond. I smiled and watched as Yuliana rushed back to Jumaane's desk and pulled a chair up alongside him.

When it came time for sharing, Jumaane proudly offered up his newly created lead with the class, an enormous smile plastered across his face. It struck me then: Yuliana was able to help improve Jumaane's writing, and neither of them could have been more pleased. Both students were highly motived to improve the quality of Jumaane's story.

Eight-year-olds like to share things. They might not know where their homework is or what happened to their other gym shoe, but they will never leave at home that smooth rock their grandma gave them two years ago, their soccer participation trophy, or that tooth they found in their backyard. I wanted to determine if giving students an opportunity to share their personal interests in school could transfer to academic growth.

In the age of social media, I was curious how technology could build upon this natural interest in social connection in the classroom. Building upon my experiences in digital writing with the National Writing Project, a teacher inquiry project seemed to be a natural next step. I wanted not only to find out if social media could help leverage the power of social interaction in an academic setting, but also I wanted to see how this interaction impacted the learning process. Does interacting with peers affect the way a student engages with the writing process? Does it build upon the power of student interest?

I rolled up my sleeves and got busy creating a teacher inquiry project. I wanted to create a social media experience where students would compose interest-driven pieces of writing and then share the writing with their classmates. Considering my needs as a facilitator, the needs of my students, and the policies of my school, I ended up selecting a platform that met all of my basic requirements: KidBlog.org. While the tool wasn't perfect and there were many things I wished I could change, I reminded myself that it wasn't about the tool; it was about what I was hoping the tool would help kids do—write for and share with an authentic audience.

When I first started this inquiry project, I was teaching at a Title I school where more than 80 percent of students qualified for the free and reduced meal program (Title I is a federal program that provides additional funding to schools that serve children from low-income families). The majority of students came from a home where they did not have Internet access or a computer. For many of my students, their only access to the Internet was at school. A majority of the students in my class were English Language Learners, speaking Spanish, Lao, or Russian at home. Even if the parents had the access and the technological ability to help their child with sharing online, more than half of the parents did not speak or read English.

Although many of the families in my class did not have a computer with Internet access at home, many of my students had older siblings who had their own smartphone with Internet access. During parent-teacher conferences, I would often see the siblings busily writing on their phones, which reinforced my contention that kids want to share their writing. It also justified the need for using social media as a means to facilitate the sharing. I wanted to introduce carefully the pathway for students to share their interests in a way that also layered in a sense of digital citizenship, which, for me, is the idea that technology can be used as a tool to facilitate young people's participation in dialogue, writing, and action on social issues about which they care—not simply for the purely recreational uses that adults often assume are the sole interest of youth. More and more, young people can find outlets online for expressing their developing identities as citizens, and I wanted to guide my students toward that exploration through blogging.

An advantage of using blogging is the opportunity for students to choose their own writing topics. As students composed for their blog, they often had a real audience in mind, which encouraged them to invest more of their energy into considering the interests of that audience. When the students were choosing writing topics, this consideration for peer interest resulted in students considering their own interests. They were less worried about what they thought the teacher wanted and more interested in writing an interesting piece that would capture the attention of their classmates.

In our social media-based digital writing workshop, students learned several different topicgenerating strategies that mirrored the strategies learned during the traditional paper-and-pencil writing workshop. For example, a student might think about an important place in her life, then choose an interesting memory that occurred at that place. In Yuliana's case, she selected Michigan's Adventure amusement park as a place of significance in her life. She started out writing the story of riding her favorite ride, sharing the experience as a focused, small moment.

Yuliana quickly realized a powerful feature of composing in a digital space: She requested peer feedback as she composed. As she wrote, she paid close attention to the comments her peers were leaving her. Due to this feedback, she decided to continue adding multiple small stories about her trip to Michigan's Adventure.

At first, the quality of writing was disappointing, and the comments were sparse and not very helpful. Also, watching eight-year-olds trying to touch type was painful. Many students would spend the entire time working and only type eight words. I realized that this struggle underscored the need for this type of work. I was also encouraged by the attitudes students had toward these struggles. They were motivated. Since they needed to use word processing as a mode for connecting with peers to share writing, students wanted to increase their typing skills.

Unexpected needs began to surface. Basic keyboarding skills, such as inserting text and basic punctuation, needed to be addressed. We learned that two apostrophes do not equal one quotation mark, that a space is needed after a period, and that Microsoft Word does not always understand proper nouns and your grammatical choices.

In my school district, students attend a technology class once per week. Part of the district technology curriculum involves touch-typing and word processing rates. Without intending to do so, my blogging project created an opportunity for a natural experiment on the subject. The technology teacher pointed out to me that the typing rates of my class were considerably higher than the other third-grade classes. By simply using a computer to write and share pieces of writ-

ing based on personal interests, my class was word processing, on average, more than twice as fast as their third-grade peers.

Writing about their interests for an authentic audience changed the way students composed. While working on their chosen piece, many students started paying close attention to feedback they received from peers. This feedback often helped them decide if they should continue working on the writing or if they should move on to a new piece. Evidence began to surface that showed students were making direct changes and improvement in their writing based solely upon peer suggestions. A peer would ask a question in the comments, and students would use color to indicate revisions based upon the comment. Students were more collaborative, and new leaders began to appear, like Yuliana, brimming with a newfound self-confidence as a writer.

Two years after this inquiry project, I was fortunate enough to receive support from the NWP to spend a day with these students in their fifth-grade classrooms. While the students I interviewed only remembered a few pieces of writing at most, all of the students remembered how this process made them feel. I asked Yuliana how writing stories on Kidblog and having classmates comment on her writing was different. She reflected on how exciting it was to have many people reading her writing, giving her tips, and asking her questions. When asked if she thought she could write the same way without doing it online, she responded by saying, "Nope. No kids are reading it, so why should I keep writing it? Maybe it's boring for them. Why should I keep writing it?"

Before this inquiry project, a trip to the computer lab often meant several hands in the air while I ran around trying to troubleshoot all of the problems. Students were taking a passive role and were hoping I would fix everything for them. However, when students were given the opportunity to write for an authentic audience around topics of interest, my job became easier. Students stopped wanting me to fix problems for them. Instead, kids were helping each other, both online and in person. They were excited to help and to be helped.

Posts became more refined, and volume of writing increased dramatically as students became more comfortable with their typing skills. Students naturally started each day checking for comments. Quality of responses began to improve, as did the quality of the pieces of writing. Even-tually, responses started to become more substantive and helpful, giving specific suggestions or asking thoughtful questions.

I had never seen this level of participation before. Students were learning because they wanted to learn. Students were identifying what they needed to learn. What's more, they were seeking out this new learning from newly established social networks. Participating in a learning process that embraced student interests caused this group of third-grade students to take an active role in their own learning.

Reflecting on the project, I realized that I probably learned more than any of my students. I realized that I needed to broaden my idea of how social media could provide students with improved social interaction. Originally, I had envisioned deep social connections within the digital space being forged as kids worked independently on computers both at school and at home. But, I hadn't expected the dramatic increase in social interaction in face-to-face settings, as students responded to content created in social media. It became a hybrid of online and in-person social networking, built around the process of writing.

Writing is a deeply personal process, and most writing is meant to be read. Since this initial inquiry project, a common idea that many of my third-grade students expressed was the desire to have their writing read and for classmates to discuss their piece of writing to help make it better. Social media expedite this process in a way that taps into student interests while decreasing the anxiety of having to stand in front of a group of people and read the piece aloud.

Will I try things differently next time? Absolutely. But, I won't worry about making it perfect. So much of what was accomplished as a class came from the journey of overcoming challenges and adapting to wrong turns and failed attempts. In the end, although using social media became entirely more work than I could have ever anticipated, I also felt the payoff was greater than I had hoped. Not only did student writing improve, but so did motivation, self-confidence, collaboration, digital citizenship, classroom citizenship, and value placed in the written expression of lived experiences.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/2800

"HAPPY MUSIC, HAPPY MUSIC": EMBRACING NON-STANDARDIZED WRITING PROCESSES IN VIDEO-MAKING

Chuck Jurich, High Desert Writing Project

"Happy music, happy music, happy music... and... STOP! ... Now I want deep music."

These were the opening instructions given to me in order to create an original music score for *Ruth Wakefield*, a silent black-and-white video about the invention of the chocolate chip cookie. I had never created music for visuals before, and Ariel (all names are pseudonyms), a fourth-grade student who wrote, directed, and edited *Ruth Wakefield*, had not either. The two of us were making it all up, figuring out a process by doing it, and discovering and inventing techniques, such as creating "themes" and motifs ("now switch back to happy music"), that would eventually become part of our future workflows.

In this narrative, I examine the student production *Ruth Wakefield* as an example of how multiple authors with a shared purpose innovate and adapt video-making writing processes to meet the needs of their project. In production-centered activities such as video-making, everyone's participation matters. I make the case that the organic, interest-driven, and socially connected writing that occurred in the making of *Ruth Wakefield* challenges the notion that writing should be reduced to a formulaic series of steps or taught as a standardized process.

An after-school video club

Ruth Wakefield was one of many student-made videos collaboratively composed at the Midway Elementary After-School Video Club. Open to fourth- and fifth-grade students, the club met directly after school twice a week for approximately 90 minutes. Due to space and supervision requirements, the club was limited to 20 students, and there was an application to join that inquired about students' interests, motivation to make videos, commitment, and ability to work well with others. Many of the fourth graders reapplied in fifth grade, becoming knowledgeable experts to help newcomers along. There was no official curriculum, and students learned how to make videos "on the job" and how to perform roles and use tools in a "just in time" and on a "need to know" basis (Gee 2007). Once they knew how to do a task, such as operate a camera or edit a video, they were expected to teach other club members as needed.

What initially led me to video-making was an interest in teaching my elementary-aged students the basics of media literacy. In 2006, I was teaching fifth grade, and my students and I were learning to critically view commercials that targeted children. Soon we began to dabble in making our own commercials—writing short, 3 to 5 shot scripts, shooting video, and editing the shots. At the time, I had a protectionist approach to media literacy (Buckingham 2003) and didn't understand the power and agency that comes with naming the world (Freire 1970) through words, images, sound, and gesture. This supplemental use of video in the classroom was interesting but clearly teacher-directed, as I chose the topics, organized the production crews, and gave specific requirements for their work. The following school year (2007), I created the after-school video club so students could explore video-making beyond the confines of school assignments. In the club, students were free to create the videos they wanted to make for an audience of their choosing (usually their peers). Students did all the work, including scriptwriting, shooting, and editing. This environment led to a much more equitable "horizontal" relationship between students and teachers: Students took on significant roles like "director," "scriptwriter," "editor," and "actor," while teachers were there to provide support for the productions as "producers." Sometimes, such as in *Ruth Wakefield*, adults performed additional roles but under the guidance of a student director.

Flexible writing processes that fit the project

When teachers heard about our video club or viewed student work, one of the first things they asked was how they could do it. In particular, teachers wanted a series of steps and a list of equipment needed. Video-making certainly has structure—such as stages of production (pre-production, production, post-production, and distribution), specialized tools (video cameras and video-editing software), and specific roles (director, actor, and editor)—but I resist recommend-ing any rigid process. The video-making process can appear linear, but it is not. In our video club, protocols (established ways of doing things) at each stage of production were regularly revised, discarded, and invented to meet the needs of the project. Participants often broke out of their assigned roles, contributing in unplanned ways. Productions regularly switched back and forth between stages.

Consider the making of *Ruth Wakefield*. Ariel didn't start with a script but instead first focused on her vision of the *final* product—a black-and-white video with music that matched and enhanced the visuals, as well as no dialogue. Next, she chose the appropriate tools to meet that vision. She then selected a cast and crew that could fulfill the necessary roles and use the tools effectively. Such a group included actors who could, with their bodies alone, communicate the story; a cameraperson capable of capturing the scenes; and a musician of some sort to create the original score. Last, the participants developed protocols that were appropriate to their situation. For example, because *Ruth Wakefield* was a silent film, the crew discovered that there was no need for the iconic command "Quiet on the set!" As a result, Ariel directed her actors while they were acting ("Now reach in the cabinet..."). In addition, Ariel communicated with her cameraperson in the middle of shots, coordinating action with camera movement. Some obstacles, such as the custodial staff vacuuming in the room, were no longer a problem, and the crew efficiently filmed through the noise. The unique context caused us on the crew to break many of our conventional protocols on how shooting was done-some of which came from my previous filmmaking experience that I shared with the students, and some of which came from students' own preconceptions of filmmaking gleaned from portrayals of moviemaking in TV shows and film.

Innovation and experimentation creates equity

The multiple authors of *Ruth Wakefield* had ample freedom to contribute new ideas and experiment with writing processes. The creation of the music score demonstrated how writing processes were influenced by the skills and limitations of the particular authors involved in the production. Our original plan was to get a piano major from the university to improvise the score in one pass, but our plan fell through when a cut of the film was not available in time for the student. With our big "premiere night" only a week away, I offered to do the score myself. With little piano experience, the task was going to be a challenge, and improvising a wonderful piece in one take was impossible. The process I chose reflected my limited ability with the tools. Similar to how she directed the actors while shooting, Ariel gave me guidance on creating the music score by watching the final cut of *Ruth Wakefield* and recording her ideas for the music in each particular scene ("Happy music..."). I called it "verbal conducting." With this guidance, I developed my own workflow for the project, recording and looping three short musical themes that reflected each stage of Ruth's journey toward the invention of the cookie. Like the construction of the visuals, I built up the score bit by bit, one short take after another. The end result was a composite of countless small performances (see Figure 1). While I followed Ariel's directions, I also took some liberties, contributing in ways that the director didn't anticipate. For example, I added a "tick tock" sound on the piano when the kitchen timer was shown on the screen. These kinds of contributions were not only common in video-making, but expected. All participants had the freedom to contribute, and every contribution mattered to the final product.



Screen capture of the music score for Ruth Wakefield

Powerful writing originates from student interests

A key scene in *Ruth Wakefield* is the "a-ha!" moment when Ruth "invents" the chocolate chip cookie. This concept, the birth of a great idea, is what spurred Ariel to make the video. Originally, Ariel planned to capture this moment in one crucial shot: a chocolate bar falling in slow motion into a bowl of flour causing a small cloud to puff up. During editing, she discovered that the falling chocolate bar only appeared in four frames of the footage—a fraction of a second. Apparently, objects fall at a very fast rate! This was a problem, so Ariel tinkered around—add-ing a clip from a different experimental take, an insert of Ruth looking and thinking, and a close-up of the bowl settling in slow motion—to lengthen the duration of the sequence. The end result was arguably more visually interesting than one slow-motion shot. During scriptwriting and filming, Ariel did not anticipate this problem, but her experience in post-production helped her to learn innovative storytelling strategies that she can use in future work. Without the interest-driven need to solve meaningful problems, Ariel would have never learned these powerful writing techniques.

Conclusion

Video-making is a wonderful opportunity to let students address topics that interest them and write using processes that fit their unique projects. While there is clear structure in video-making (stages of production, protocols, roles, tools, and products), standardizing the video-making process ignores the complexity of the art and craft. There are countless ways to make a video, and to teach in just one way (through a scope and sequence, whole group direct instruction, or nonmalleable protocols and procedures) only squashes innovation and experimentation. As proof of the deadening effects of always thinking in terms of the status quo, think of the countless formulaic sitcoms in the mainstream media that seem to reuse the same character types and jokes. Aren't we more captivated when filmmakers (and our students) take risks and



Stills from the "a-ha" sequence in Ruth Wakefield

make us think in a different way? Teaching techniques out of context is not a great way to learn and is, in fact, the opposite of interest-driven learning. My experience working with children in the video club suggests that we all learn best when trying to solve real problems that are important to us. This kind of interest-driven, peer-supported work, complete with a shared sense of purpose and intensive collaborative interaction, was common. I was honored to be a part of the *Ruth Wakefield* crew and proud of our collective work.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/1395

THE WORD AND THE WORLD: CONNECTING WRITING TO LIVES OF STUDENTS

Meenoo Rami, Philadelphia Writing Project

Although interest plays a huge role in inspiring motivation and confidence in developing writers, it is important to consider how interest-driven writing is also equitable, connected to the shared values of a school community, and inclusive of all members of a learning community. This year, I witnessed 66 students in the eleventh grade produce a teen magazine for their peers. From a germ of an idea to full-fledged online publication of our issue, I saw my students grapple with learning that required them to understand, negotiate, and advance the principles of equity, social connection, and full participation.

My journey toward embracing interest-driven writing

As an English teacher, I dream of students who care about the way they construct their arguments, the way they shape their sentences, and the way they find just the right words to capture their audience's attention. I know that students in every classroom can do this, and I am always trying to find ways to engage students in topics about which they care deeply so that they are inspired to invest time in carefully crafting their writing. I know that writing improves when students are invested in what they are writing. When I ask students to become experts of the subject of their writing, the work becomes authentic for them.

In authentic writing experiences, students are asked to explore, investigate, question, create, and share their findings. Teachers know from hours of reviewing student work that writing becomes interesting to read when it becomes interesting to write. They know the difference between the rote essay on an assigned topic and the scribbles of a poem or a short story that lives within student journals, and they know the feeling of joy that comes from reading a piece of writing about which a student is passionate. My energy is doubled when students approach me seeking feedback on a project that stems from their true interests. The conversation leaves me feeling rejuvenated and excited about the progress of the idea.

I first came to think about leveraging my students' authentic interests when I was teaching a ninth-grade English class a number of years ago. Although I had managed to build a rapport with my students while mostly following the required curriculum with an injection of creativity and curiosity here and there, the true talent of my students did not surface until we decided to make public service announcements for local nonprofit organizations in our city. Students chose a nonprofit organization based in Philadelphia that was focused on issues to which they felt deeply connected, whether it was environmentalism, arts funding, or gun violence. They essentially became an advertising team, and the local organization was their client.

Through this experience, I was able to see students who normally felt disengaged by traditional academic writing tasks transform into project managers, creative directors, or logistics coordinators for their teams. They created print, radio, and video PSAs to bring to light some of the issues that youth face every day in Philadelphia and attended meetings of the local School Reform Commission. One student, Nikki Adeli, was moved to testify, "What have we done wrong as students, teachers, and counselors to be the target of these budget cuts? My job is to be a student, and these budgets are putting my job and my learning at risk."

This experience changed my stance as an educator in several ways. I finally saw that when students have authentic choices in what they want to investigate, produce, and share, they become invested in their work in a way that is invigorating for the entire learning community. The same student who would often put his head down for the entire period was rushing to the door and asking if he would have time to work on this product design in class during this unit. When this enthusiasm combines with meaningful work that teaches students skills such as forming interview questions, understanding a client's mission/needs, and crafting an effective message using visual components and written language, something important happens. Students begin to see the connection between effective use of language and helping someone get an important message out about an issue that affects their lives. Students begin to believe in the power of their own voices.

Developing an interest-driven academic writing project

This school year started for me with this goal in mind: I wanted my students to have authentic reading and writing experiences in my classroom. I wanted them to go beyond rote essays on a given topic or passing commentary about current events in blog posts. I wanted us as a learning community to experience what it might take to publish a piece of writing that was relevant to the lives of my students. What my class decided upon was the creation of a teen magazine.

Open up any magazine aimed at teens, and you'll find it filled with gratuitous advertisements aimed at selling more unnecessary products to teens. As a class, we wanted to see what it would look like if we came together to create a teen magazine. So that is exactly what we did this year. During the second quarter, my students at the Science Leadership Academy produced a teen magazine. After examining articles on which they could model their own work, the students created their own teen magazine, covering topics such as music, art, time management, and Philadelphia's food scene. They learned about research, writing, design, and layout. So far, more than 2,000 people have clicked on our magazine and examined the students' work.



Cover of the Winter 2013 Edition of [SLA]ng Link to the issue: http://issuu.com/slapenswagg/docs/mag_rami1

Through this work, students came not only to understand that all media convey a carefully packaged message, but they also began to decode, unwrap, and critically examine these messages. Through the use of technology, students went from just consuming these messages to actually crafting the message they wanted other teens to read. To publish our teen magazine, we used the application pages, which is a standard writing application on the Mac platform. Through this application, we were able to become our own printing house for our magazine.

Embodying the principles of connected learning

The challenge of being a practitioner is that you have to bring together your deepest values about teaching and learning in line with the day-to-day pedagogical practice while creating meaningful learning experiences with your students. The values behind connected learning allowed me to take a closer look at the classroom practice I was implementing and see how aligned my ideas were to these principles.

Equity: The teen magazine project allowed all students to participate, and each student was responsible for owning some part of the project. Whether students worked in teams for the layout design, took pictures for the art in the magazine, or simply came up with the name (hardest part of the process), all students contributed something relevant to the magazine based on their individual strengths. No student was able to sit idly by while other students worked because the scope of the project was large enough that all students' help was necessary to make it a reality.

Social connection: There were inherent social connections among the students while working on this project because they could not complete their tasks without knowing what others were doing and synthesizing the various parts of the magazine production process. For example, students who worked on the cover could not move forward without knowing the style of art chosen for the pages within the magazine or knowing the focus of some of the major articles written for the magazine. Students were sharing a culture of collaboration, trust, and common mission to produce together the best magazine possible. The work we did together wouldn't have been possible without trust within the community and connections among the students, built over the course of the year. It would have been much more difficult to pull off this work right at the beginning of the year when we were just getting to know one another. As one student shared, "I think that I already was a good writer, but this quarter has helped me learn how to edit my work better [and] also how to write with other people to create one piece. This quarter also helped me to learn how to do in-text citations."

Participation: It took full participation from the entire class to complete this publication. Because each student felt ownership over a specific task for the magazine, there was an investment in seeing the process come to the point of publication. We divided ourselves into teams of copy editors, layout editors, art and design editors, and each student worked alone or with a partner to submit at least one article to the magazine. As such, no student would have been able to stay on the sidelines for the project. Real work calls for real participation, and it draws on the strength of each student to contribute to something larger, produced together as a class. As another student noted, "I was never much for English and definitely not much for writing. But with the magazine, I began to write about things that I really care about. Through the magazine I had to write, I had to do a lot of research to make sure what I was writing was accurate. I also gained skills in editing, which would serve me greatly in my future."

Concluding thoughts

The idea that lives on for me from this year's work is that my students are hungry for authentic reading and writing experiences. We are not playing school but rather using our collective energies to come together to produce work that is pride-inducing and will help other classes reach their potential, too. We shared the magazine with hundreds of attendees to our school's annual EduCon conference, and we were proud of the work we did together as a class. The feedback we received will only make our work better in the future, and we can't wait to begin again.

Link to the Digital Is Resource: http://digitalis.nwp.org/resource/3616

CONCLUSION: INNOVATIVE STRATEGIES FOR PASSING THROUGH THE GATEWAY OF INTEREST-DRIVEN LEARNING

The three narratives in this chapter offer powerful illustrations of how digital learning opportunities that spring from and cultivate students' blossoming personal and social interests have the potential to reap tremendous benefits in terms of increasing engagement and participation in learning, facilitating peer interaction, and spurring academic and civic empowerment. Importantly, considering that two of the three narratives explore innovative classroom practice, these texts debunk the idea that interests are necessarily easier and more appropriate to explore in outof-school settings. Furthermore, the blogging, filmmaking, and magazine production described in these narratives engaged youth across a wide spectrum of ages and with a range of interests, including amusement parks, great inventions, and critical media analysis. These successes remind us that all young people are irrepressibly curious about the world in which they live and are eager to make their mark upon that world if educators provide them with opportunities to explore their passions (which the contributors in this chapter have shown is possible within the context of academic activities that still meet the demands of literacy standards in schools).

For instance, Christopher Working's narrative highlights the innate desire of young people to connect over shared interests—both with peers they see each day in the classroom and with young people that they encounter only in online spaces. Indeed, this narrative demonstrates the power of online communities like blogs in expanding students' social networks and offering authentic audiences for pieces of writing. The excitement that these third graders felt when they read comments that others had left on their blogs speaks to the transformative experience of discovering that one's personal interests are shared by countless others, opening up new horizons of understanding about the multiple possibilities for connection in the world. Importantly, however, these online connections did not stifle face-to-face social connections; rather, as Christopher demonstrates, working on digital posts increased and reinforced peer communication as students worked together to craft captivating texts for each other to read.

The quote that Christopher captures from one young student ("No kids are reading it, so why should I keep on writing it?") demonstrates the motivation that accompanies authentic purpose to writing assignments, as well as the disappointment that results from a lack of opportunities to share interest-driven writing. Christopher harnesses the engagement that resulted from encouraging students to explore their interests as a way to present academic grammar lessons—situating academic writing not as a practice that exists in a vacuum, but rather as a set of skills crucial to clear communication across contexts.

Chuck Jurich's narrative further reveals the positive outcomes that result when formal instruction is couched within informal, interest-driven writing projects in his description of the after-school video production club he facilitated with fourth- and fifth-grade students. Chuck reminds us that we learn discipline-specific skills best when we are engaged in project-based learning and face a problem that requires us to find solutions. As his students strove to create their own short films, they learned the formal skills of film production on an "as needed" basis when they wanted new strategies to express their intended messages. Chuck vividly captures the creativity and innovation that emerge when young people face challenges in conveying their interests to a wider audience. As they gather new skill sets, those interests buoy them through the inevitable roadblocks. Jurich's narrative also reminds us of the multimodal nature of writing in the digital age—how the process of directing actors in a film turns human actions, music, and visuals into text to be creatively manipulated. The location of this project in an after-school setting allowed freedom to experiment with various modalities that is a refreshing reminder to classroom teachers of the benefits that emerge from "messing around" with technology. Indeed, Chuck's refusal to reduce the video-making process into a formulaic collection of procedures highlights the non-linear stops and starts that comprise the creative process—a potentially transformative lesson that challenges the paradigm of standardized writing instruction.

Meenoo Rami's work with high-school students shows how interests can be tapped to direct and support learning with young people of all ages and also reveals that young people are eager to grapple with social issues in the world around them. Christopher, Chuck, and Meenoo describe their personal journeys as educators, from seeing their students as *analyzers* of text, media, and society to seeing them as *producers* capable of naming their worlds through their digital words. Instead of only analyzing film with students, Chuck invited his students to become filmmakers. In a similar vein, Meenoo moved from analyzing magazine advertisements and public service announcements with her students to helping them produce their own publications. Interests are often viewed as mere hobbies with importance at the personal level, but Meenoo's students in Philadel-phia demonstrated their deep commitment to issues such as environmentalism, gang violence, and the struggling school system. In doing so, they voiced their status as civic actors ready to provide counter-narratives to the consumerist view of young people that they saw in popular media.

Meenoo details how her students took ownership of this project in ways that she had not seen with previous academic assignments, and she attributes this success to the connectedness of magazine production. Meenoo's project allowed students to realize that the contributions of each were crucial to the success of the whole endeavor, which increased motivation and deepened the level of meaning that students could take from the journey. These realizations also are key to deliberating with others in civil society, thereby providing an important civic lesson.

The three narratives in this section serve to expand and complicate the meaning of the term "interest" in interest-driven learning—rendering it not only an expression of students' individual pursuits, but an indication of the importance of basing education on context and a holistic understanding of the whole child in both formal and informal learning spaces. Rather than being an extra or a privilege in students' lives, interest-driven learning is essential to promoting students' academic, emotional, and civic empowerment.

CHAPTER TWO: PEER-SUPPORTED LEARNING

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Cindy O'Donnell-Allen, Colorado State University

Guiding Youth Voice in the Classroom

In one of the narratives included in this chapter, two pre-service teachers, Chelsea Geier and David Neisler, accurately note that the word "collaboration" gets "thrown around" a lot in education these days. Standards documents, creativity experts, and business leaders routinely list collaboration along with creativity and communication as one of the "three C's" necessary for twenty-first-century learning. Unlike Chelsea and David, however, these sources take for granted that the expectation for collaboration necessarily results in truly connected learning.

When we reflect more carefully on even our most happenstance experiences of gathering with other human beings—crowding with fellow passengers on a bus, deliberating together on a jury, or even gathering with relatives at a family reunion—we realize that assembling as a group does not necessarily make a collaborative experience. In classrooms, too, students are jumbled together in groups whether by the whim of course scheduling or a lesson plan's design. If they are to experience the benefits of constructing meaning together, however, certain features must be present. What characterizes classrooms where peer-connected learning takes place?

As an infographic on the Connected Learning website explains, peer-supported learning experiences demonstrate a "socially meaningful and knowledge-rich ecology of ongoing participation, self-expression, and recognition" (http://connectedlearning.tv/infographic). Much as they do in their everyday exchanges with peers and friends, young people fluidly contribute, share, and give feedback in inclusive social experiences. When all goes well, "students are active and highly engaged, and the classroom is often vibrant and boisterous" (Ito et al. 2013:36). As an educator for over 25 years—first in a high-school English classroom and now as a college professor—I have learned that all does not always go well, however.

I have organized my teaching around the notion that knowledge does not reside solely in the individual. Rather, it is constructed jointly and informed, for better or worse, by the less visible facets of the learning context—the values, power dynamics, and often conflicting goals and expectations individuals bring to collective tasks. Ideally, learners capitalize on the individual strengths and knowledge of each member. Using the tools present in the environment, they combine these assets to create products that demonstrate greater understanding of complex concepts and essential ideas than individuals could have reached alone. Despite my continuing commitment to these principles, sometimes, even the most carefully designed learning experiences can go awry. A case in point:

As a high-school English teacher, I adapted an assignment called a "body biography" that was originally intended as an autobiographical exploration (Underwood 1987) into a multimodal task that would allow students to collaborate in analyzing characters from *Hamlet*. I grouped students based on choice, according to the characters that most interested them. As a first step, students chose one member of their group to lie down on a large sheet of butcher paper and traced a life-sized outline of the student's body. They then used multicolored markers to fill the outline with their chosen character's most significant lines from the play; symbols representing the character's personality traits and key plot events involving the character; and an original text they wrote to illustrate the character's motivations. They later presented their body biographies to the class, using their products as a stimulus for a discussion they facilitated to further explore the character and the play.

Looking back even now, I see this assignment as the perfect invitation for peer-supported learning, as it affords students the opportunity to use multimodal tools in expressing their collaborative interpretations of a challenging text. Back then, I was equally confident that the assignment would be a sure-fire success because it was so consonant with my value for constructivist learning. And, even though I noticed the typical disruptions that occur when students work in small groups, their final products and the rich discussion that resulted from their presentations convinced me of their rich learning experiences. Later, however, when Peter Smagorinsky and I analyzed the recordings we had made as small groups constructed their body biographies, we discovered that students' experiences were far more uneven than met the eye (Smagorinsky and O'Donnell-Allen 2000).

One all-girl group exhibited virtually every feature of peer-supported learning, "[embodying] ample opportunities for individual contribution and development in the service of collective goals" (Ito et al. 2013:48). Their body biography reflected their high-functioning interactions. On the other end of the spectrum, another group produced a stunning final product. When we analyzed their interactions, however, we discovered that their interactions largely replicated the less equitable and unforeseen (at least to Peter and me) power hierarchies that existed in the classroom based on students' social standing. This mixed group included the most marginalized students in the classroom—the cowboy who didn't fit in to the mainstream social scene, an African-American male who struggled academically, a cheerleader with a diagnosed learning disability, and a boy with a surgically repaired cleft palate, whose speech and physical appearance often made him socially withdrawn. Even though they appeared "busy" when I observed their behavior in the moment, the transcripts showed occasional racist comments, a disengagement with the task, or complete with-drawal from the group. In the end, the only girl in the group completed the final product on her own because she was unwilling to sacrifice a good grade to the group's dysfunction.

This experience taught me that looks can be deceiving. Even when assignments are designed to be collaborative and students are grouped according to interest, peer-supported learning is not guaranteed. If youth are to share a value for learning together, they still need the more sustained mentoring that teachers can provide. Consequently, I now have changed my teaching practices to support students in creating specific norms to guide their work even before they begin the learning task so that they can revisit them when interactions become unproductive. During learning, I allow myself to intervene when I observe such instances in order to support students in getting back on track. After learning, I require students to reflect on their collaborative experiences, naming what went well and what they need to change in order to collaborate more effectively in future contexts.

Admittedly, these moves are small and subtle. They may appear as mere nods toward achieving teachers' loftier goals, but they are essential if students are to experience inclusive participation, tackle challenges they cannot meet alone, and benefit from the interconnectedness the *Connected Learning* report characterizes as peer-supported learning (Ito et al. 2013:78). As you read the narratives that follow, I encourage you to notice the small moves Katie McKay makes to ensure that even the most marginalized students draw on digital and multimodal tools to move closer to the center of the classroom. Lacy Manship demonstrates how even the youngest students can become co-inquirers to document learning in the classroom. Finally, Chelsea Geier and David Neisler frankly describe how pre-service teachers experience (or do not experience) peer-supported learning and how those experiences have the potential to shape their future teaching. In every instance, the small moves teachers make allow students to learn in significant ways. Take a look.

LIGHTS, CAMERA, SOCIAL ACTION!

Katie McKay, Heart of Texas Writing Project

"Should we let the white kid play today?" "No offense, but you're black, right?" "Sweeping is a woman's job."

In these snippets of conversation, my fourth-grade students were searching for the language to talk about complicated issues of race, gender, power, and equity. When I overheard them talking, I suppressed the inclination to reprimand them. Instead, I initiated a study aiming to equip them with the language and knowledge to learn about and from each other in peer-connected ways. In the course of that year, I discovered that it was possible to build students' literacy skills while simultaneously giving them the opportunity to pursue culturally relevant questions related to equity.

I applied to teach at this small Texas Title I school in part because of the diverse student demographics. This particular year, my transitional bilingual class included students who were of mixed race; who had come to us as refugees from Africa; or were first-, second-, or third-generation Mexican Americans. I had a student who was closely tied to his Native-American culture and another who was from a white, upper-middle-class household.

For the first time in seventy years, the school had just been branded with the scarlet letters "AU": Academically Unacceptable. Though I joined the staff after this designation had been made, my classroom was under tremendous scrutiny. Some days the students had to crane their necks just to see me, outnumbered by classroom "visitors" with clipboards. I was required to provide de-tailed daily plans that explained explicitly how I was meeting standards and preparing students for state tests. In spite of this constant surveillance, I was committed to providing my students with authentic opportunities to develop as readers and writers.

With the flood of media around the 2008 presidential race as our backdrop, we delved into a project-based unit on the history of discrimination in the United States. In the process of building charts, making timelines, labeling maps, and discussing and reading about current events, students posed the question, "Has Martin Luther King, Jr.'s dream come true?" Students identified blatant discrimination and more subtle micro-aggressions occurring inside and outside our classroom, as well as in our nation's past and present. Eventually, they began to inquire how they might try on the role of agents of change.

Reading from Jeff Kinney's *Diary of a Wimpy Kid* series provided the opportunity for them to do so. Students became inspired to create comics for their third- and fifth-grade peers and worked together in small groups—heterogeneously mixed by gender, language, and literacy development—to write scripts, illustrate comic strip panels, and transform their work into narrated slideshows. As a culminating project, each group produced two iMovies, one highlighting common micro-aggressions students see today and a second about the history of discrimination in the United States. In each movie that portrayed a current scenario, students wrote in an "agent of change" who bravely and respectfully defended the rights of others.

Both our process and purpose throughout the unit encouraged an inclusive classroom community. When it came time to record students' voices, students offered each other language support or feedback on reading with expression. Each person's work was dependent upon the work of a peer who had different strengths and experiences that could contribute to the end result. As is the beauty of group projects, however, certain questions and obstacles arose, especially when it came to determining the make-up of the groups.

"Our group's not big enough for all of our parts. Could someone from another group make a cameo appearance?"

"We need someone who speaks Spanish. Could someone help us?"

The answer to each problem was to include another student who had been excluded previously or to step into the shoes of a character different from oneself. A Mexican-American student recorded the words, "I have a dream...." A boy read the part of Rosa Parks refusing to stand. So while each movie credited two to three writer/producers, groups overlapped as they scripted, cast, and edited. Some students were successful throughout this project even though I had struggled to reach them in previous learning experiences.

Though Diana had attended our school since kindergarten, her oral proficiency in English was behind that of her peers. Quiet in nature, she was treated like a little sister by her friends. "We help Diana out," they had informed me on the first day of school, translating Diana's quiet *palabras*. Before this project, Diana had often kept her eyes down during lessons, as if praying not to be called on. Now, her drive to advocate for the rights of women and Spanish speakers along with her interest in digital tools had her rushing around from group to group. She helped English speakers write and record lines in Spanish. She recorded and re-recorded her voice, liberated through the opportunity to try her English lines until they sounded just right to her. Later in the year at our author's reading at a local bookstore, Diana proudly introduced herself and presented her iMovie to an audience of at least fifty people. The use of digital tools gave Diana a forum and the confidence and motivation to make her voice heard.

The project drew another student into the classroom community, as well. Samuel was known as the best artist in the class, but he was frequently overcome with anger, having recently experienced the death of a brother and the divorce of his parents. Many days, I considered it a success if I simply could get him to come out from under his desk where he liked to draw. Though most of his previous artwork reflected Samuel's anger, this unit gave him a new subject. He smiled when he saw his work projected onto a big screen—the voices of his peers bringing his characters to life. While drawing was an initial hook, the use of digital media ensured Samuel's full participation. He couldn't just draw and pass his illustrations to his peers. His voice was needed to play one of the parts, and he had to take photos of each picture to upload for the slideshow. There was too much to do without everyone's participation, and Samuel stepped up to the challenge. His group completed their project by the deadline—the first time he had completed an assignment all year.

Even as early as fourth grade, many children form beliefs about what kind of students they are or are not. Like Diana and Samuel, Eduardo was no exception. Although he was a positive leader on the soccer field, in class he often used his influence to derail lessons. Working in a diverse group for this project, however, required him to channel his strengths more positively. I intentionally grouped Eduardo with a female African refugee and a boy who identified strongly with his Native-American roots. Eduardo had moved to Texas from Mexico as a young child. As this group worked together, the members began to realize that they had more in common than they originally had thought, each having witnessed discrimination against people from their own culture. One of the movies they produced together was about the importance of the critical masses during the Civil Rights Movement. Eduardo read the part of Martin Luther King, Jr., reciting the first lines of his "I Have a Dream" speech. At our author's reading, he introduced the movie by saying, "We can be heroes, too, if we believe we can change the world." Eduardo, in his commitment to the ideas that their movie portrayed, helped to create a new class culture of students who identified as capable of making a difference.

Though this project was transformative for these students and our classroom community as a whole, this success did not release us from the mandates imposed by the school's "AU" designation. Even as we were engaging in discussions of resistance and impact, visits from district supervisors reminded us of the current realities of the looming tests. I purposely avoided designing the project as one that would allow me to "teach to the test"; however, the skills required by the project allowed me to provide instruction within a meaningful context. As students wrote their scripts, I conducted mini-lessons on effective sequencing, introductions, conclusions, and organization. When it was time to study the "testing genre," I reminded students of all they had learned in writing their scripts. Realizing that there was an audience for their writing and that their words should serve a purpose, students were more motivated to practice timed writing as required.

When I reflect on this unit, I see that we were not only working to promote tolerance and appreciation for diversity in our community. We also were resisting an oppressive educational context. In the midst of the pressure to perform on tests that were isolating and divisive, we united in collaborative work that required critical thinking and trouble-shooting. In a climate that valued silence, antiquated skills, and high-stakes testing, we engaged in peer-connected learning that highlighted twenty-first-century skills and made an impact on our community.

These larger purposes were not lost on the students, who demonstrated intense engagement with their work. In our time crunch toward the end of the project, students had to learn to navigate iMovie quickly. The room constantly abuzz, it was a challenge to record so many different scripts without also recording distracting background noise. Some students came in at lunch or stayed after school to finish their work. In the end, the rushed feel was fitting. The message was clear: our work was urgent, and there was no time to waste.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/781

WANNA SEE THE MOVIE?

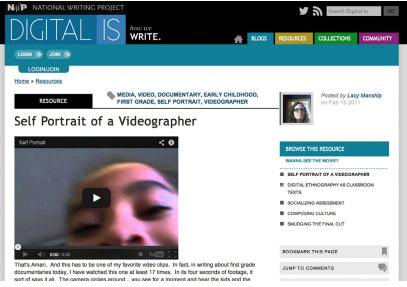
Lacy Manship, UNC Charlotte Writing Project

I sit among a pile of video camera batteries, flash drives, laptop cord, hard drives, screened devices, an audio recorder, and stacks of crayon and pencil papers, and photographs. I am trying to consolidate a multimodal record of two years of teaching. Finally somewhere I hit a goldmine of footage from our class Flip video camera. And I am fascinated, inspired, and in love with these students all over again.

This reflection emerged from my work with a National Writing Project group to inquire into urban literacies. I was curious to discover how students and I might create space in our classroom for funds of knowledge (Moll et al. 1992) and other peer (Corsaro 1992), home, and communitybased literacies not usually valued in school. I teach in an urban elementary school on the outer edges of a large city. Our school includes students from many ethnic and cultural groups speaking at least six different languages. Over the two years that this inquiry took place, my students and I looped together through both kindergarten and first grade. Although many students flowed in and out of our class in accordance with the movement of households in our city, the core group featured here—Amari, Joslyn, Everardo, and May—were together both years.

In the second year of the project, which I focus on here, the children and I documented our classroom "underlife"—those stories of the classroom that often go unnoticed (Brooke 1987; Canagarajah 1997). To find out how these documentaries might provide a window into the peer, home, and community literacies that figured into our everyday school lives, I set up "class videographer" as a classroom job. Just as it was someone's job to water the plants, someone else was in charge of using the Flip camera to document the day. The class videographer was free to video any part of our classroom and to share the camera with others who wanted to record. The video clips became sources of reflection, analysis, and sharing for us as they organically wove into our activities. The children and I were co-inquirers in the process of documenting our school lives.

By reflecting in writing on a set of video clips taken by the children, I discovered from their perspective what it was like to be in our classroom and how new literacy practices are shaped through video, sound, and text. Some videos made me reflect on the broad context of being a first-grade classroom videographer. A simple four seconds of footage created by one student, Amari, sort of says it all to me. At the start of the video, her face is close to the screen in self-portrait.



Screen shot of classroom video posted to Digital Is

Then the camera circles around; you see and hear for a moment the kids and the classroom. And you hear me as I announce a "five-minute warning" until it is time to clean up and go to lunch. Then, the camera circles back around to Amari. This brief clip illustrates how she is forming and is being formed by the social identity of our classroom. With the camera in her hand, circling around the social world of first grade, she is participating in the composition of a classroom story.

Other students also filmed videos that served as assessment documents and records of engagement. In one clip, Joslyn assumes a digital persona presenting an infomercial for a scripted reading program required by the school. This recording preserved an accessible moment for the children and me to engage in critical dialogue about the commodification of learning and literacy. With Joslyn's infomercial to mediate that conversation, the kids could enter into some challenging and complex discussions about who decides what it means to be a reader.

In a four-minute video clip Everardo recorded, he moves about the classroom, simultaneously pointing the camera at his classmates, asking them what they are doing, and joining in on their conversations. In another clip, he zooms in on seedlings at the windowsill and tinfoil at the science center. As he chooses where to point the camera, seemingly random objects take on new meaning and demonstrate his interaction with the learning environment. Everardo used the camera to mediate his social activity as he talked to everyone in the room, a thing he didn't often do at school otherwise. With a classroom culture that valued composition as an evolving, rolling entity, however, Everardo found a space to generate a story that mattered.

When he moved about the classroom, asking all his classmates what they were doing, he was joining a conversation that already existed. There had already been many instances of children recording, watching, and discussing one another's documentary clips. All of these experiences combined to create a moment in which Everardo decided to take up the camera and engage. The children had something to say about school and a place to say it, inviting other people to listen and respond. They were constantly posing and answering a question that May once videotaped herself asking a classmate: "Wanna see the movie?"

The camera became a symbol for me: an icon of how young children can engage in social digital composition. And while it would be really easy to focus on the image of Amari's circling camera, it is not as simple as that. My "five-minute warning" in the background was a reminder that the dominant narratives of school absolutely defined our classroom, too. Although I like to reminisce on our classroom as being one of those free-flowing, whole-language contexts, I as the teacher still was privileged to make more decisions about time, space, and activity—even if they happened to include a lot of "progressive" pedagogical choices. Still, putting this digital tool into the children's hands and under their control created a counter-narrative, a story of school in which the children made decisions about the time, space, and activity they chose to record.

The institutional forces working on these children were sometimes painfully rigid. In this "highneeds school," I was supposed to use a scripted literacy curriculum. Under mandate, I was required to comply with the use of weekly timed phonics and reading tests, the results of which were used to name children to be pulled out of our classroom during science, social studies, and even math for intensive and reductive "literacy instruction." These conditions, in which the voices and freedoms of our classroom were tightly controlled, make the visibility and naming of the creative literacies of our documentaries all the more important. May's video—in which she asks a classmate, "Wanna see the movie?"—is a three-second moment in the larger context of a school year, yet it shows the social nature of composing within our learning community. May isn't writing empty sentences into worksheet slots. She is engaging with a group of people who "make stuff" and even make stuff about their making. In another clip, May created a documentary of "The Hat Store," a riff off of Patricia Pollaco's *Chicken Sunday*. She was able to do so because I brought the text into the classroom during a shared reading and provided materials in the dramatic play center. May captured the children on video as they recreated the story together. As she filmed, she engaged her social world, including other children, me, and the literature. May's rich multimodal text pushed back against scripted curriculum, allowing her to demonstrate her understanding in ways that traditional learning could not. Her video intentionally harnessed social networks, showing how a child's learning is not individual but deeply connected to peers, their contexts, and to the lens of the narrator. The activity of filming created a new level of participation, capturing children's participation not only in school, but also in the naming of what school is.

The videos remind me that although there are challenges in this work of facilitating children's documentary making, there also is joy. Having access to these documentaries both during that school year and since has allowed me to negotiate a story of teaching that sometimes felt and feels like a very unsatisfactory jumble of diagnostic reading tests, endless meetings, and an accompanying anxiety. They remind me to hold in the forefront of my memory these people for whom I care deeply and who have really interesting things to say.

The project demonstrates the power of putting cameras in the hands of all students, no matter what the contexts of their classroom. Allowing students to capture and narrate their lives in the classroom—even when those experiences appear less playful or less free—offers valuable glimpses into how they perceive the communities they share, how they learn together, and what forms of play and freedom might emerge in the process. And my continued access to our classroom world during that year gave and gives me energy to keep at it as a teacher, even in challenging circumstances.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/1807

TWO FUTURE TEACHERS' VIEWS ON PEER-SUPPORTED LEARNING

Chelsea Geier and David Neisler, Colorado State University

Colorado State University's E401, "Teaching Reading," is a required course for all students aspiring to teach language arts in a public school setting. The semester we were enrolled in the course, our professor, Dr. Antero Garcia, began in a theoretical vein with an exploration of *Literacy: Reading the Word and the World* by Paulo Freire and Donaldo Macedo (1987). Even though there was a great deal of surface-level uniformity in the demographic makeup of E401—most students in our class were white and in their early twenties—there were strong divisions of interests between students who were drawn to more practically oriented subjects explored in class and those who were comfortable considering the act of reading from a more philosophical stance. Many in the class expected it to be organized exclusively around teaching techniques, so there was great consternation when the semester began with reading this text. These same students breathed a collective sigh of relief when the focus later shifted to the practical as we read *When Kids Can't Read: What Teachers Can Do* by Kylene Beers (2002).

What is literacy?

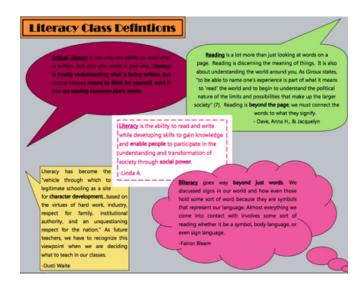
During the first few weeks of the course, however, we experienced peer-supported connected learning by considering the broader question, "What is literacy?" As a class, we worked with Freire and Macedo and other texts to arrive at some ideas, comparing their definitions to our own personal definitions. Beginning with this essential question, which persisted throughout the course, eventually allowed most students to understand that we must pursue an answer in order to define how to teach reading.

Dr. Garcia's class culminated in a collaborative multiliteracies project that allowed students to experience peer-supported connected learning by creating a Digital Is resource for other active and pre-service teachers. In lieu of a final paper, which would have had an audience of one, this project synthesized much of the course content by requiring us to demonstrate our own definitions of literacy. In the process of creating it, we grappled with what it means to teach reading effectively, both as pre-service teachers and as future educators who might someday create similar collaborative assignments in our own classrooms.

The multiliteracies project

The multiliteracies project began with individual brainstorming sessions in which students created a bubble chart that visually depicted the concepts explored during the semester and how they related to one another. With our individually crafted bubble charts in hand, we then collaborated on a class-consensus bubble chart that would eventually become the blueprint for our Digital Is resource.

Example of bubble chart defining literacy



The bubble chart reflected philosophical sections such as "What is Power?" alongside more practice-based sections such as "Standards and Textbooks: Hidden Connection." Based on our interests, we formed groups to create a section of the Digital Is resource that captured the gist of what the class had learned about their topic.

How does peer support impact learning?

In completing the final project, we learned that peer-supported learning absolutely involves having a social connection with others. Thirty-minute blocks of collaboration time over several class periods allowed groups to "hang out" and casually talk about our end-products. We also contributed our individual expertise to the project in a social, less formal way within our groups. This expertise influenced which group we chose, increased our engagement, and also lessened the pressure of completing the project.

As future educators, we learned about collaboration firsthand through this project. Collaboration is a word often thrown around classrooms. Teachers create projects for students to "work together" and learn the process of "compromise," but often these projects result in many people doing individual projects remotely, then cutting and pasting them together for a final product. We learned that creating an environment for true collaboration requires more than just putting students in groups with their peers and saying, "Go!" Dr. Garcia designed a project that embodied peer-supported learning, allowing us to "[share and give] feedback in inclusive social experiences that are fluid and highly engaging" (Ito et al. 2013:12). In fact, the entire course was designed so that we developed and revisited our evolving definitions of literacy in anticipation of our final project.

How to facilitate learning that actually connects with learners

Another important element of connected learning throughout the course was interest-powered learning. Because we were allowed to choose our topic for the project, students were more interested in the work we were doing, and our thoughts and ideas flowed more easily than they might have if we were forced into a group. In David's experience, the multiliteracies project differed from other assignments he had completed because of the seamlessness of this collaboration. His group had diverse interests, and the digital format, along with the open-ended aspect of the assignment, allowed group members to take an approach for which they had genuine enthusiasm and to contribute to the overall quality of the final project. While David was interested in a more text-based exploration of the subject, his collaborators were very interested in adding audio and visual elements to the piece.

The positive aspects of collaboration were not uniform for all students, however. Even though Dr. Garcia determined the final make-up of the groups, all projects did not go as planned. Some of our classmates chose groups with their friends, while others used very little collaboration at all to create their resources. Collaboration is tricky because if group members' ideas or passion for the project do not mesh, everyone may not be on the same page. This possibility is an unavoidable factor in connected learning that can be both beneficial and detrimental to learning, depending on individual group members' work ethic and the effort they put forth.

How can we ensure effective participation, not just individual work thrown together?

Educators, especially new teachers, often are concerned about the degree of participation in peer-supported collaborative projects. Are all members contributing equally to produce the project? How do we grade group projects? How should students be assessed? The expertise factor was hugely important in the overall product Chelsea's group created. One member composed a song, and another made a digital slideshow. Another student contributed her experience with blogging and other twenty-first-century skills by putting everyone's work together in order to define literacy in a "real-world" context.

Working with a group to create this digital resource posed some challenges but also allowed us to provide a great deal of support for one another. Through this project, Chelsea and her partner became Facebook friends in the end—a big deal in the social world—because they connected around a topic that interested both of them inside and outside the classroom. Collaborating with peers supported her learning because the work felt more like a passionate conversation that her group wanted to reproduce for the world to hear, rather than a forced project with an unnecessary deadline completed by people with vastly different ideas. Overall, the inclusive nature of the multiliteracies project allowed our class to effectively represent what we had learned together since everyone's voices were present in the Digital Is resource.

Conclusion

Looking back, we realize that the learning environment Dr. Garcia created in his classroom was much different from others in our college careers where collaborative projects also were required. Our experiences with connected learning taught us firsthand that it has validity. At some points during the course, we and our classmates may not have understood our learning and work in those terms. Still, as future teachers, we learned that there is so much power in allowing students to connect what they're learning in the classroom to real-world experiences. While the basic concept of connected learning might seem logical, finding ways to help students make connections to the real world truly is an art.

In David's case, he began the project with the mindset that he was a student writing a piece that would be viewed by professionals. As he crafted the project with his fellow group members, however, David began to see himself on par with his audience, as a teacher-in-training with insights that could benefit others. David now realizes that this was a very important shift in thinking—the point where he ceased to view himself as a person on the student end of a teacher/student binary.

As we envision our future classrooms, we are eager to share the empowering aspects of peersupported connected learning with our students. We want to give them the opportunity we had to become experts on a topic, share it with a wider audience, and feel the sense of dignity that comes from that experience.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/5029

CONCLUSION: A GLIMPSE BEHIND THE CURTAIN AT THE "FRONT" AND "BACK" PRACTICES OF PEER-SUPPORTED LEARNING CLASSROOMS

In her study of creative collaboration, Vera John-Steiner makes the following assertion: "In attempting to analyze the way scientific advances are co-constructed, it would be helpful to rely on both the 'front' and the 'back' of creative practices" (2000:46). That is, in order to fully understand the finished products that mark discovery, we must also examine the "modes of thought" that lead to them. I likewise contend that in order to replicate instances of peer-supported learning in classrooms, we must do more than fawn over students' impressive "front practices"—the iMovies, classroom documentaries, and multiliteracies projects they produce. We must also examine the "back practices" that allow youth to co-construct knowledge in the first place. As noted in my introduction to this chapter, authentic peer-supported learning doesn't happen by accident. The narratives written by Katie McKay, Lacy Manship, Chelsea Geier, and David Neisler allow us to pull back the curtain and glimpse backstage into classrooms where this kind of learning occurs.

The *Connected Learning* report clearly outlines what youth do in peer-supported learning environments, mostly outside of school: they connect with other youth around shared interests and goals, often using new media to do so; they exchange resources and information freely; they learn from and with mentors and models; they "tinker, explore, hypothesize and test assumptions" together (Ito et al. 2013:81); and they make their work public, again often with the assistance of new media.

But what do teachers do? How do they operate as intentional architects who plan classrooms that allow peer-supported learning to occur? While not an exhaustive list, the following "back practices" emerge when we look at the peer-supported classrooms described in this chapter's narratives:

• Teachers pose the right questions for themselves and teach their students to do the same. Both Katie and Lacy begin their narratives with the kind of "wonderings" that characterize teacher inquiry (Hubbard and Power 2003). As Katie eavesdropped on her students' conversations, she wondered how peer-supported learning might help students harness their language skills to confront the micro-aggressions in their classroom and the macro-aggressions in our nation's history. Katie's question framed her students' question in turn: "Has Martin Luther King, Jr.'s dream come true?" Similarly, Lacy's question of how student-created documentaries "might provide a window into the peer, home, and community literacies that figured into our everyday school lives" led her students to examine what learning looked like in their classroom community and to question mandated reading practices.

The question "What is literacy?" sustained pre-service teachers Chelsea and David's peer-supported learning for an entire course. This question was initially posed by their professor, but as Gordon Wells (1999) points out, questions don't always have to originate with the student in order to be meaningful. After all, teachers can pose interesting questions, too. What matters is that the questions are taken up by students, jointly negotiated, and collaboratively pursued, just as they were by Chelsea, David, and their classmates in Antero Garcia's classroom. Notably, the guiding questions featured in all of these narratives were in some way related to equity, which ensured that the questions mattered immediately *and* eventually to students, both in and outside the classroom. Furthermore the questions were complex enough that peer-supported learning was required to broach some provisional answers and to spin out other questions that were likely to fuel a lifetime of future inquiries.

• Teachers who value peer-supported learning create inclusive classrooms where even marginalized students can draw on each other's strengths to manage tasks they could not have accomplished alone. In Katie's racially and linguistically diverse classroom, her student Diana learned that her home language was an asset when English students who could not speak Spanish asked her to translate lines for their slideshows. Samuel's artistic skills were essential to his group's completion of their project. Eduardo and his peers created a movie on the Civil Rights Movement, emanating from past experiences of discrimination experienced in their respective cultures.

Lacy's students routinely engaged their peers to document their classroom life for an entire year, showing in the process "how a child's learning is not individual but deeply connected to peers, their contexts, and to the lens of the narrator. The activity of filming created a new level of participation, capturing children's participation not only in school, but also in the naming of what school is."

Finally, Chelsea and David spoke to the rewards and challenges of collaboration as they "grappled with what it means to teach reading effectively" in the process of creating a resource for Digital Is. Students braided together their individual definitions of literacy with those from their textbooks to create joint definitions that unfurled throughout the course and were featured in their final product. Students relied on one another's varied expertise with digital tools to recreate "a passionate conversation [for] the world to hear." Despite the challenges the class experienced with collaboration, Chelsea and David are persuaded enough by the potential of peer-supported learning that they want to make similar opportunities available to their future students.

- Teachers support students in using new media to amplify and push out their learning. Regrettably, some teachers still use computers in their classrooms as nothing more than fancy typewriters and see the Internet as just a high-tech card catalogue students access to consume outside knowledge (Leander 2007). By contrast, Lacy and Katie view their students as producers who use multimodal and digital tools to construct and showcase their knowledge so they can share it with others. Katie challenged her students to blend print, sound, and images in digital texts that inspired younger students and a local bookstore audience. Lacy bestowed upon her students the composer's agency by placing a camera in their young hands. Finally, David described the empowering leveling effect of creating a final product for the Digital Is network: "I began to see myself on par with my audience, as a teacher-in-training with insights that could benefit others. . . . I ceased to view myself as a person on the student end of a teacher/student binary."
- *Teachers make it all about the kids, not all about the mandates.* Both Katie and Lacy teach in contexts where youth are externally defined by deficit labels like "academically unacceptable" and "high needs." Scripted curriculum, standardized tests, and district supervisors who view individual achievement as the pinnacle of academic success could easily thwart their impulses to teach in ways they believe are supportive of children's learning. Yet they are savvy in negotiating this tension. They push back. They meet mandates but not at the expense of connected learning.

Katie embedded required skills in peer-supported, project-based instruction. Lacy complied with required reading tests, but also provided materials to support students' dramatic play around a children's book they enjoyed reading together. Even in highly regulated environments that might disconnect them from their learning, youth read, compose, and share meaningful texts. One imagines that based on the strength of their own peer-supported learning experiences, Chelsea and David will help their students do the same. These teachers and teachers-to-be consistently strive in Katie's words to "create a new class culture of students who [identify] themselves as capable of making a difference."

Taken together, the classrooms described in this chapter function as powerful counter-narratives to the constant refrain in the media and political arena that the United States is slipping, that the educational system is broken, and that teachers are to blame. They offer conclusive evidence that the rich learning experiences described mostly in out-of-school spaces in the *Connected Learning* report also are possible inside of schools. Indeed, they are alive and well in classrooms organized around the principle of peer-supported learning.

CHAPTER THREE: ACADEMICALLY ORIENTED TEACHING

Antero Garcia, Colorado State University

Incubating Teacher Ingenuity

Perhaps more than any other component of a connected learning framework, the cultivation of academically oriented forms of engagement should, in principle, resonate most clearly with the familiar areas of teacher practice. By their nature, schools should thrive as spaces in which teachers develop rich contexts of incubating academic growth over time. But what do we *mean* when we talk about "academic" learning in the twenty-first century? Are the same forms of knowledge and the same disciplinary approaches to them that we've prescribed in classrooms what are needed for an "always on" digitally savvy posterity? Looking at nationwide initiatives, there are general thrusts toward change and originality. The U.S. Department of Education's Investing in Innovation (I3) Fund, for instance, attempts to highlight powerful ways to shift how we educate young people.

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While many youth today are succeeding within our schools, there is a disconnect between how the U.S. education system understands "academically oriented," the forms of learning precluded in this definition, and the demographics of youth receiving this educational opportunity whole-sale. In the *Connected Learning* report, academically- oriented engagement can be understood as: "Learners flourish and realize their potential when they can connect their interests and social engagement to academic studies, civic engagement, and career opportunity" (Ito et al. 2013:8). Unpacking this definition, it is important to consider the context of academic learning being framed: educators must push to integrate the socially and culturally meaningful contexts of youths' lives with the academic expectations of today's classrooms.

The common rhetoric since the turn of the century is that today's educators are preparing students for forms of labor that do not yet exist. Our youths' consumptive, productive, civic, and labor practices extend and challenge what we know today to comprise "academic" school activities. James Paul Gee has called the types of prepared youth who will flourish when they leave our classrooms "shape-shifting portfolio people" (2004). Academically prepared youth should be able to shift their skill sets for the new contexts of labor and innovation in the future. These students are ushering in a post-post-industrial era of education that may be rife with the possibilities of alleviating our nation's "educational debt" (Ladson-Billings 2006). And yet our schools are largely operating in an industrial, factory model of education (Berliner and Biddle 1996; McNeil 2000).

At the same time that connected learning researchers are ushering in a wave of powerful findings of youth learning and engagement vis-à-vis new media literacies, the pendulum of U.S. education reform is swinging ever farther toward metrics of academic assessment and standardization. This tendency is only part of the problem. What are most lacking in this space are broadened definitions of what counts as academic when our students today take tests and are evaluated as part of their regular in-school learning and matriculation. Research, outreach, and collective dialogue can push beyond these garroting definitions of "academic" within our classrooms. They can shape public perception and push against policies that stymie teacher support of powerful youth learning in schools. In describing the thrilling learning opportunities at the game-based school Quest To Learn in the *Connected Learning* report, Ito et al. note that the school "bestows academic legitimacy on forms of work that are not easily measured by standardized assessments" (2013:37). It takes an ecosystem of engaged and passionate individuals to ignite and orient academic learning to reflect the authentic experiences of today's youth. And though teachers today would be hard-pressed to find many districts that bestow "academic legitimacy" on classroom work that is not easily measured by standardized tests, the examples of possibilities in this chapter point to ways teachers can push the academic culture within schools.

Look at the three examples of academically oriented connected learning in this chapter and notice the scope of where this work heads. Janelle Bence's teacher-driven inquiry does not focus on a singular issue within her classroom; instead, it highlights how teachers must contend with cultural shifts in an era of connected learning. Janelle's exploration highlights the need for teachers to feel comfortable, questioning and recognizing their own pedagogical uncertainty. Connected learning does not come from educators having all of the answers all of the time; it comes from the same kinds of deep learning we ask of our students.

Following Janelle's example, Larissa Pahomov's and Nick Kremer's case studies orient the rest of this chapter to focus on two separate aspects of working with youth. Larissa underscores ways to support traditional writing practices using Google Docs as a pedagogical tool. She not only emphasizes positive digital literacies that can be fostered relatively easily within schools, but does so in ways that fit strategically within the writing strategies naturally transpiring in her classroom. Likewise, Nick identifies the powerful possibilities and cultural cache of comics in his classroom. He highlights ways the genre, its conventions, and his students' familiarity with them create rich spaces of expertise, interest, and healthy provocation within the classroom.

The three examples in this chapter build on the spaces for academically oriented teaching and innovation. This innovation can be found at the theoretical and pedagogical level, in the ways forms of content are integrated and in the kinds of tools adopted within classroom spaces. The contexts and needs of students drive the ways these educators reframe academic connected learning within the classroom.

ACADEMICALLY ORIENTED TEACHING: HOW DO I TEACH WHAT I DO NOT KNOW?

Janelle Bence, North Star of Texas Writing Project

Look around on buses, subways, restaurants, and classrooms. What are many teenage boys doing? Playing video games. They are engrossed in a wide array of games that blur the lines of reality and fantasy, especially those that enable players to interact with one another while playing. Many of these gamers are highly intelligent and definitely expert in their chosen game milieu, but in a school setting, many have checked out, finding little to no value in the classroom. Why? How is it that they can spend hours in unfamiliar worlds trying to accomplish increasingly difficult tasks, but in school, they are passive at best? I needed to discover the answer.

At the time of this inquiry, I was teaching at an urban high school deemed low performing by the Texas state and federal accountability systems (Valenzuela 1999). The majority of the students were English Language Learners and of a low socioeconomic class. How many deficit labels must learners bear? Ironically, this historic high school was in the middle of a wealthy area of Dallas, making the divide between the haves and have-nots even clearer. It is this disparity—the need to serve this marginalized community of learners—that makes finding innovative and authentic lessons all the more crucial.

Having chosen to work at this high school for over a decade, I have had the privilege of working with some truly exceptional young adults. Most of them recent immigrants, my students were highly motivated, even more so than most of those who were born here. Perhaps, they were more cognizant of the opportunities in the United States as compared to their Americanborn counterparts. Many in my classes were without their parents, without their families, without their friends. They had made several sacrifices for what promised to be a better life. That's why it is so difficult to see anyone discount their abilities. Admittedly, state test scores were not high, but progress was made. Despite some improvement, in the context of highstakes testing, a score can make or break the educational confidence of my dynamic students.

How can teachers be inspired to take risks and hook students by including their interests?

On my journey to discovery, I had to face the facts. I'm not a gamer. I don't know about video games. I don't play them hour upon hour. I am far from an expert on any video game whatsoever. How, then, could I approach this topic or include this interest in teaching to re-engage some of these lost learners? In other words, how do I teach what I do not know?

In order to help my learners make gains in such tasks, I realized early on in my career that I had to ask my students to take huge leaps (of faith) with me in order to get them fluent in academic English. Doing so meant creating learning opportunities that truly engaged and challenged them. It meant trying strategies that many other teachers would not. It meant advocating for my learners. It meant constantly playing with and reinventing my lessons. I was always searching for ideas.

After a National Writing Project Annual Meeting—specifically a session on gaming—I was convinced that gaming had to somehow be included in my classroom. During the too-short

session, all participants were absorbed in brainstorming games that addressed various content areas. The potential for not only playing, but also creating, games was immense. I didn't know how or when, but I did know I had to, at the very least, determine how gaming could be represented in my classroom.

So, I asked those who were much more experienced in these efforts about where to begin. Enter James Paul Gee and his book *What Video Games Have to Teach Us about Learning and Literacy.* As I read, I began to document my understandings and wonderings, which was an important step in making my inquiry transparent and public. The airing out of ideas in public spaces via my blog helped me remain resolved and committed to this inquiry. My reading led to more questions, which are always welcomed for they fuel my research and praxis.

These wonderings did not happen in isolation. On the contrary, I had available several resources that provided support and networks, such as other educators who had more experience with gaming in their classroom, game designers, and systems thinkers. It is through one of these collaborations that I was inspired to help my learners become producers of digital games, not only consumers. This practice would require learners to become informed experts in the content, as well as composers of powerful narrative to drive their games.

Through a *Teachers Teaching Teachers* episode, I was able to ask others: How do I get started? And the answer was simple: Take a risk and newb it up.

It sounded simple but still daunting. The point, however, was very clear. I needed to walk into this with the idea that if I were to be a teacher turned gamer turned facilitator of gaming principles in the classroom, I would have to trust that my previous teaching sense would guide me through taking enough risks to better serve my students. I needed to push myself to the next level while keeping in mind that there was still support out there: hints, cheats, hacks, other educators, other gamers, and other risk-takers. It would take all of this to continue to advance.

And, that's where I am. I have yet to get to that final stage, yet to challenge the big boss of this journey. I am unsure if I ever want to feel like that's it. The idea of being pushed into another challenging and uncertain yet worthy endeavor is motivating.

Are inquiries like these important for educators?

My journey through game-based learning in the classroom *is* connected learning. I knew that if I were to give my students more comprehensible access to academic tasks, I had to use a context that all learners could understand. Gaming crosses cultural and economic boundaries due to painstaking design and marketing. When I made reference to high-interest, well-crafted narrative, I didn't want to use text only a certain group could access. Gaming helps to make learning more equitable. Plus, since so many games are played online or have networks, learners are readily plugged in to groups with similar interests. It feeds both the social need and opportunity to participate in something along with other diverse learners.

Gaming also provided me with a connected learning experience. First, I have always been fascinated with the intersection of technology and learning. They go hand in hand not because combining technology and learning is a best practice but because that's how we live. Digital video games are designed with such careful cognitive deliberation that I gained a great deal of understanding of systems thinking, how people learn, and the impact of the former on the latter. Second, this inquiry broadened my peer networks. I cannot pretend to learn anything about gaming without connecting with my teenage learners. That would be a futile venture. I have also accessed minds in various fields to inform my inquiry. These connections were not only a form of research, but also a source of important support, invaluable when stepping out of one's comfort zone.

As I delved into the world of gaming in the literacy classroom, I had more questions than answers. Thus, the idea of inquiry drove my quest. But there were four key lessons that resulted from this journey.

Lesson 1: Learn All You Can

I had to learn how and why video games reflected and supported sound pedagogy. I read and followed and tweeted and questioned and blogged. I took copious notes to understand how the systems in gaming could support the systems within my classroom.

Lesson 2: Power in Numbers

After my research, I came to realize that I couldn't possibly find all the answers on my own. I had to connect with others. So I did. I reached out to watch webinars. I participated in and facilitated webcasts. I networked. I had to hear how other educators used gaming in the classroom. I had to understand what potential there was for various programs, applications, etc.

Lesson 3: Take Risks

It's one thing to study something and talk about it. It's quite another to actually try something new. As I learned about various sites like MIT's SCRATCH and GameStar Mechanic, I realized I could no longer take a passive backseat to learning. (After all, wasn't this the behavior I wanted to change in my learners?) I had to actively work on these platforms just as my students would. I would have to force myself to learn these uncomfortable new skills.

Lesson 4: Put Yourself in Your Students' Shoes and Newb it Up!

Even though I knew what had to be done, I was acting like so many of my own students. I was staring at the blank page. I was wide-eyed in front of the computer screen, frozen by the task at hand. I didn't know what to expect. I didn't know what to do. I didn't know what would happen—exactly like our students. Yet, I was expected to step out of my comfort zone and learn. How? The most important lesson came from facilitating a *Teachers Teaching Teachers* episode entitled "Gaming Questions from Texas, Minecraft, and the '2011 Horizon Report K12 Edition.'" From this, I understood the starting point to transition from passive to active learner: I had to jump it or "Newb it up!" as one of the guests suggested. I just had to go for it.

I must be vigilant about ways to help my students learn in an authentic manner. This hinges on my willingness to try new things and my dedication to preparing my learners for an uncertain future. From my experience, I learned that game-based learning offers my learners a context in which they can find plausible solutions to real-world problems and endless potential platforms to publish this important work. Teenagers can research how a candidate wins a presidential election. They can transform this knowledge into no-tech games that can serve as blueprints for potential digital for elementary school children. This task requires content mastery, certainly, but the soft skills of knowing the target audience and how to articulate these lessons in an engaging manner are not easily achieved in more traditional settings. Game design and game-based learning are rigorous yet authentic, and they encourage learners not by eliminating risk but by providing a risk-worthy context for learning.

Sometimes, there is a difference between what you know is best for your learners and what you feel comfortable teaching. Stepping out of your comfort zone is a challenge for many but often necessary to connect with today's learners. Educators cannot be experts in the many interests and passions of their learners. Simply put, there are just too many. There are too many innovations—too many outlets where students can publish what they've produced on these topics. It's just not possible to be an "expert" in so many fields.

By finding a way to connect to students and their passions—by investigating what makes them tick and bridging to academic tasks—educators are modeling risks that encourage the same behavior in their learners. It is possible to make inquiry a process to connect to new people, new content, new networks, new understandings, and new wonderings. It is a lot of work. And it is empowering our students to make important connections to what drives them and what drives them to learn.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/2766

BRINGING "TRADITIONAL" ESSAY WRITING INTO THE DIGITAL WORLD

Larissa Pahomov, Science Leadership Academy

Overview and context

The question of how to use technology in the classroom can often divide a school. This project looks at a writing activity called a "2Fer" as a means for helping support writing skills that can be transferred across various spaces. Some teachers will embrace what's available to them, designing innovative multimedia projects that use all the gadgets at hand. Others, perhaps as a reaction to the first group, will resolve to do things the way they've always done, at best sending students to the computer lab to type up a final paper. At the school where I work, however, this divide has never had a chance to develop. Science Leadership Academy (SLA) has had a 1:1 laptop program from day one, and as our principal Chris Lehmann would say, the computers have been "like oxygen"—ubiquitous, necessary, and invisible. As a result, we were not just using the computers for banner projects that relied heavily on the technology, but designing ways to facilitate and enhance our curriculum with the powerful tools that our students have at their fingertips 24/7.

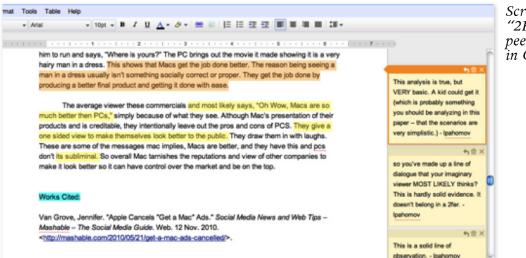
This program meant both opportunities and challenges for teaching the writing process to students. The teaching faculty wanted students to engage with all kinds of digital writing and composition, but we did not want to ignore more "old-fashioned" writing formats. A part of this came out of the knowledge that, upon entering college, our students would likely land in more traditional learning environments than they had enjoyed at SLA.

So, formal essay writing was a given. But, how could we hack it for maximum learning? This inquiry was our framing question throughout the project. We addressed this potential weak spot in our students' education with a unique assignment called "The 2Fer"—a two-page analytical paper that students write every two weeks on any topic they choose. The assignment includes builtin time for thesis workshops, peer editing of drafts, and reflection and inventory once papers are returned with comments. This process was designed to help students identify their own strengths and weaknesses, learn that "becoming a better writer" is a lifelong journey, and ultimately become masters of their own improvement. Originally, the assignment was done in an analog setting, but once our school signed up for Google Accounts, it was clear that the 2Fer essays should live in Google Docs. We moved work online and had students keep one running document for all their assignments, with the goal of deeply enriching the writing process. Even with our laptops, an SLA classroom closely resembles your typical high-school environment: 30-plus students who need structure, as well as freedom. This assignment design sought to give them both.

Development

This online portfolio system keeps students tuned in to their own academic growth by design. Every part of their writing process is preserved, and students are naturally encouraged to revisit past work. They literally have to scroll past it before composing something new.

The basic guidelines for the writing assignment live at the top, reminding students of the academic expectations. The template then has built-in space for more traditional "rough drafts" and "final drafts," while still using the dynamic commenting and editing functions in Google Docs.



Screen shot of "2Fer" assignment peer-editing process in Google Docs

The rough draft is a space where student peer editing can take place, encouraging collaboration, and then the instructor's comments go on the final copy. This choice actually sidesteps the real-time editing that Google Docs allows, but having multiple "snapshots" of different drafts is more valuable to students when it is time to reflect on their process.

The final draft is followed by a rubric with five categories: Thesis/Focus, Content/Development, Organization, Style, and Conventions. The final draft is where students receive both written comments and a numerical grade for each category. After the rubric comes space for a follow-up assignment and also a place for students to reflect on successes and goals for next time. These reflections are the last thing students type in an essay cycle, and the first thing they look at when it is time to paste in a new template and start all over again. As a result, the course for improvement is set primarily by the students through their own personal reflection, instead of prescribed by the teacher.

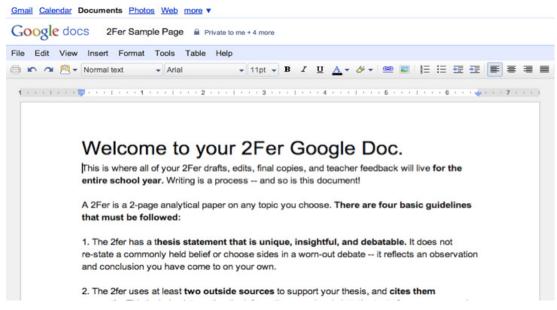
The 2Fer writing assignment encourages equity both with its focus and its design. The core question that 2Fers seek to answer is "why is the world the way that it is?" Students are invited to replace "the world" with a more specific topic of their choice, validating their own ideas and experiences while requiring the thesis to be "unique, insightful, and debatable." This structure encourages students to step away from arguments that have already been made ad nauseam and to develop their own commentary on the issues that engage our modern world, whether it's an exploration of American foreign policy or the personal style of Nicki Minaj (two essays written by the same student over the course of one year).

The cyclical design of the assignment also provides equal footing for students by setting them up on an individualized course of improvement. The system emphasizes feedback via effective mentorship, not number grades, and requires that students take responsibility for their own areas of improvement. Subsequent grades are based primarily on how a student is improving over time instead of the student's work in comparison to his or her peers. The message comes through loud and clear: you are in charge of your own learning.

Participation

This assignment uses a purposeful blend of in-person and digital media to maximize student participation. Students receive a full hour of class time for peer editing and revision. They work with the student next to them and shake hands in agreement that they will give each other's pa-

per their best editing efforts. After this peer editing had taken place, students have a moment to debrief and then begin to sift through the feedback and compose their final draft.



Screen Shot of "2Fer" Assignment in Google Docs

The fun of computerized comments has definitely increased participation. Teenage students type much more than they would ever write by hand and get deeper into the feedback left for them. Students take pride in their work as editors, and I give "shout-outs" to high-quality edits throughout the year, projecting a student's Google Doc on the board and reading prudent comments to the class. Students often refer to peer comments when listing their own strengths and weaknesses in the reflection after the final draft.

The ease of sharing also encourages students to seek multiple editors and share their work with friends. As the year the assignment was instituted continued, "I read that 2Fer!" was not an uncommon exclamation among the grade. If your learning community signs up for Google Apps en masse, it is also possible to make documents public to everyone within that domain, a great middle ground between selective sharing and public to the web.

Social connection

For the first couple of years, we kept the sharing of 2Fers within the school building. We wanted students to benefit from reading each other's work, but we didn't want to pressure students to broadcast every piece of writing as they were going through their year-long course of improvement. This year, however, we came up with a middle ground with the website 2FerQuarterly.org. Once per quarter, students are invited to post their best work to the site—something they have revised again after receiving teacher feedback. This piece also is their submission for their quarterly portfolio grade. The site emulates professional websites such as *Salon* or *The Huffington Post*, with students posting commentary on various subjects—science, humanities, media, politics, technology, and even some criticism of 2Fer writing itself. The eleventh grade then has a chance not only to view quality work, but also engage with the ideas being presented. The site has not received significant attention outside our school's community, but we didn't expect that. The goal was to increase connectivity between students, and that has been achieved.

Conclusion

On the whole, this project has successfully utilized digital tools to prepare students for collegelevel academic writing. The process also has shown students how they could use these innovative tools on their own, even if they were applying them toward a more "traditional" endeavor. Since we started our process, teachers in the science department have created their own model on Google Docs for reviewing lab reports, and I have also created a modified version for writing assignments in my tenth grade class. The model really can be adapted for any work that benefits from collection and feedback over time.

This assignment does require that students are comfortable with collaboration and reflection. I was reminded of this fact when, during our first peer editing session, a transfer student confessed to me that she had never been asked to look at another student's paper before. Her situation is not unusual, but it's not insurmountable either. I showed her student samples and then gave her a few prompts, which I would repeat to many throughout the year: Identify the thesis. Re-write it in your own words. Find the support. Does it fit? Does the context satisfy? How about that conclusion?

These questions should sound familiar to any English teacher. Moving essay writing online did not revolutionize the process; it just enhanced what we already wanted students to be doing. Like any good tool, after a while it blended into the background. Students no longer thought about the way it was shaping and influencing their practice; they just did it, with more thought and clarity than they had before.

Category	"Exceeds Expectations"	What did you do well? What needs work?
Thesis and Focus	Sharp, distinct thesis argument made about a single topic with evident awareness of task and audience.	
Content and Development	Substantive, relevant and illustrative content that demonstrates a clear understanding of the purpose. Thorough elaboration with effectively presented information consistently supported with well-chosen details.	
Organization	Effective organizational strategies and structures, such as logical order and transitions, which develop a controlling idea.	
Style	Precise control of language, stylistic techniques, and sentence structures that create a consistent and effective tone .	
Conventions	Thorough control of sentence formation. Few errors, if any, are present in grammar, usage, spelling and punctuation, and the errors that are present do not interfere with meaning.	

Student Reflection: When you get your feedback from Ms. Pahomov, take notes in each category about what worked well and what you need to improve. This needs to be completed before your next 2Fer will be graded.

2fer Rubric

Link to Digital Is Resource: http://digitalis.nwp.org/resource/2738

WRITING WITH PICTURES: COMICS AND CONNECTED LEARNING

Nick Kremer, Columbia Public Schools, University of Missouri-Columbia

As a language arts teacher, my ultimate goal each day is to help students learn to effectively express themselves and to accurately understand the communication of others. In my practice, I have found that comics/graphic novels are fantastic means by which students can hone these skills. Yet, this choice has sometimes invoked the skepticism of students, parents, and even other educators who question the use of visual texts in an English language classroom. Comics do, in fact, employ the same literacy skills that print texts require (structural organization, inferences derived from context clues, connotations/denotations, cultural allusions, stylistic elements of craft, etc.). They just use a different dialect, so to speak.

This latter (visual) vernacular, however, has not traditionally been taught in the English classroom with the same due diligence given other forms of literacy, leaving students largely to fend for themselves in a twenty-first century increasingly proliferated by visual media. The net result is that important visual texts (advertisements, photojournalism, film, television, video games, websites, etc.) are often unnoticed by our students—students who become the undergraduates, professionals, and citizens of the future whose success so integrally depends on their ability to be masters of (and not mastered by) this semiotic language.

Comics/graphic novels allow students to engage their extracurricular reading and writing interests in an academic manner where development of the aforementioned college and career readiness skills can be refined. I have found comics most effective when used in a workshop environment that features mini-lessons highlighting visual thinking strategies applied to high-quality mentor texts. A gradual release of instructor responsibility allows for significant opportunities for student immersion within the medium, frequent occasions for student collaboration among peers, and guided transmediation exercises (teaching students how to adapt a piece of written text into a comic format or vice-versa).

For example, in a ninth-grade English/Government linked course I previously taught, I used mainstream comics as an accessible entry point for my students to ultimately be able to critically analyze political cartoons and propaganda. Many of my students, from low socioeconomic back-grounds, had more experience and inherent interest in reading comics than the latter text types, so using comics as the foundation for investigating visual literacy techniques led to more successful transfer of those skills later in the unit when students were better prepared for (and thus more engrossed in) tackling political texts.

To engage students from the very beginning, I started the unit with an exercise where students were charged with taking a poem or prose excerpt read previously in class and adapting it into a comic format. Limiting myself to short five-minute mini-lectures (featured in my NWP Digital Is resource as YouTube videos), I briefly showcased illustrative techniques such as closure, paneling, encapsulation, lettering, coloring, and abstraction as they are utilized in popular graphic novels (I polled my students ahead of time to determine the examples I would include). Between mini-lectures, I shifted the role of thinker to my students, asking them to "learn by doing" as they applied each technique to their own composition and worked step-by-step to adapt their self-selected poem/prose excerpt into a single comic-book page.

I made sure to participate alongside my students, modeling my writing process in front of the class as I created my own comic composition. Vocalizing a rationale for the various authorial decisions I was making helped to provide further scaffolding for students struggling to understand how the visual literacy principles discussed could be applied in practice. I also made sure to provide opportunities for students to share their compositions within peer writing groups, which provided an authentic audience for the students and an intrinsic desire for further revision. By the end of the lesson, students emerged with both a composition with which they took personal ownership and a newfound understanding and respect for visual media. And, I benefited from a valuable formative assessment of their initial understanding of the principles being examined, which I used to shape the rest of my instruction for that unit.



Example of Student's Transmediation Assignment

More than a stand-alone lesson, however, this example provides a way of thinking about teaching comics (or truthfully, any text) in a connected, academically oriented manner. Rather than drowning students in an excessive amount of comic content knowledge, I transformed the learning environment such that students engaged thoroughly in reading/writing within the comic medium, affording them frequent occasions to practice rigorous and relevant communication skills that will prepare them for real-world applications of visual literacy (as found in the Common Core State Standards).

Furthermore, the approach suggested in this framework for teaching validates students as important foundations of their own learning and celebrates their participation as academically meaningful. One student who particularly stands out from my English/Government linked course was Hope, a girl whose eighth-grade academic records indicated she was "below basic" in all aspects of English. In reality, Hope was a voracious reader and a creative writer. She just often refused to participate in assessment tasks that she found personally meaningless, particularly standardized ones, resulting in minimal achievement scores. Figure 9 features a draft that Hope submitted in response to the aforementioned transmediation lesson; it is an adaptation of the William Carlos Williams' poem "The Act." Even in its rough draft form, the piece provides evidence of advanced literary analysis and critical thinking, a far cry from the labels previously prescribed to Hope.

How can the academic performance of the same individual change so drastically over such a short period of time?

By building in opportunities for Hope and other students to individually influence their own learning tasks (i.e., allowing students to choose the original narrative texts to adapt and position-

ing them as the artistic directors applying each visual technique studied), the assignment implicitly became more interest-powered and peer-supported. Traditionally, the teacher is depicted as the sole authority in the classroom, with students relegated to a "find-the-one-right-answer" capacity. This framework turns that model upside down, positioning the student as the participatory agent and primary source of intellectual capital and allowing the teacher to transition into a mentorship role. The teacher becomes a coach whose primary responsibility is to connect students' interests to academic domains that will enhance their final product, one that is treated with the same legitimacy as any other professionally produced visual narrative. While it's admittedly unlikely that Hope or others will springboard to lucrative careers in the (albeit, growing) comics industry due to this experience, it's virtually guaranteed that she and every other student will repeatedly encounter circumstances in their professional future where an understanding of graphic design and multimodal literacy gives them an edge in their ensuing performance.

Being literate in the twenty-first century arguably requires individuals to be adept "codeswitchers"—to be able to proficiently navigate a wide variety of text types within a future that will continue to innovate new ones altogether. The approach outlined thus far works equally well with advertisements, infographics, music videos, and any other number of visual artifacts from popular culture. Though I have found success in my own practice using similar pedagogical structures with each of these multimedia texts and would certainly encourage teachers to exploit any medium that is likely to engage students in rigorous and relevant inquiry, comics continue to emerge for me as the form that leverages the most transfer of academic skills back to traditional forms of reading (which, of course, remain as important as they always have been). Because of this, comics position themselves as a powerful means of achieving equity in the classroom and helping to bridge the literacy achievement gap among students.

Here I think of Treyvon, a student formerly enrolled in my Reading Enrichment course who stridently refused to engage in any of the dozens of prose novels with which I tried to hook his attention during our first month together. As Treyvon began to trust me more over the year, he opened up about his "too-cool-for-school" façade. The reason he didn't attempt to read wasn't because he wasn't interested in the topics or didn't feel he could contribute to our classroom conversations; it was because he had been absent so often in elementary school that he had never developed the ability to read. Treyvon was terribly embarrassed by this fact and continuously hid it from his peers by pretending to be in control of the situation. When I introduced the option of reading *Batman* comics to Treyvon during independent reading time, though, he jumped at the opportunity and soaked up as many minutes of active reading as he could.

Expectedly, many struggling readers like Treyvon find graphic novels to be more engaging than their non-illustrative counterparts and more in-tune with the video narratives they are heavily consuming in their personal lives. Yet unlike these other visual texts, comics remain a printlanguage-packed medium, one that features surprisingly sophisticated vocabulary and linguistic structures in visually contextualized instances. The additional modality provides a means for those students who have not regularly interacted with (print) text-rich environments in the past to equitably engage in the reading task at hand, while the experience simultaneously (and subtly) exposes them to written language they have been lacking. As a result, as struggling readers become active readers of graphic novels, their overall literacy skills improve: they learn to visualize texts internally as they read, appreciate literary techniques, acquire vocabulary, reinforce grammar and spelling, and foster an overall love of reading that they then begin to transfer to other non-visual texts. This was certainly the case for Treyvon, whose reading level jumped by twenty percentile points during his one year in my class (see Dyson 1997 for more work on comics in English language arts classrooms).

Equity in the classroom can be realized further by providing structured opportunities for peer collaboration, and comics inherently present unique opportunities for social connection that mirror the exchanges students actively seek in their everyday lives. Perhaps more so than any other medium, comics invite a shared reading experience. Unlike a prose novel, the illustrations and visual layout of comics allow for them to easily be viewed simultaneously by multiple readers. Unlike film and other multimedia, though, the fragmented nature of comics established by its series of discrete panels invites conversation throughout the reading process instead of only at paused intervals. When student duos or trios are set loose with a single graphic novel, the literacy interchanges that occur as they mutually make meaning from the text are enthralling.

Similarly, when teams of students are employed in the act of creating a comic together, a range of twenty-first-century skills, such as leadership, collaboration, conscientiousness, and adaptability, are cultivated in a messy, play-like environment that all-too-accurately mirrors the real world, where professional comics are produced through the shared efforts of a writer, illustrator, letterer, inker, colorist, editor, etc. When I formerly taught creative writing, I collaborated with the art teacher in my building so that we could pair our students in a cross-course graphic narrative project. My students would develop a script, and his students would design a "dummy" draft storyboard of it. My students would provide revisionary feedback and so on, back and forth until they created a professional product.

For a host of historically biased reasons I won't begin to discuss here, comics often carry the unfair stereotype of being an inferior literary form, one that "short changes" students of genuine literacy experiences. In reality, however, comics can clearly be a powerful medium for connected learning in the classroom, fostering academic growth and college and career readiness in more holistic, enduring ways than many of the alternatives championed by those who hold such disdain.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/4030

CONCLUSION: SUPPORTING AND PRODDING THE ACADEMIC

A robust definition of academically oriented learning doesn't start and stop with "stuff that happens in schools." The civic and work-based life-learning that teachers like Janelle Bence, Larissa Pahomov, and Nick Kremer are pushing toward help remind us that academic learning must be purposeful. The "academic" in "academically oriented learning" is a foundational discipline for our students to be able to thrive and shape society in the future.

As we consider ways for teachers to sustain connected learning practices within today's school spaces, I believe it is necessary for us to prod and provoke how schools frame and assess "the academic." In particular, Janelle helps illustrate the importance of giving space for educators to question and reframe their practice.

In looking at balanced definitions of academically thriving connected learning, I am left wondering, Where is the support for teachers like the three in this chapter? And, what role does mentorship play in connected learning classrooms?

Often, what we have now in place of support is a smorgasbord of products, ideas, and tools. What is lacking is a way to funnel the kinds of ingenuity we see from teachers like Larissa, Nick, and Janelle into sustained work toward a pedagogy of connected learning. Digital Is, as a resource, is a great community and space for conversation and dialogue. It is, though, an "extra" space where teachers get to learn from other self-selecting, stellar teachers. How do we connect entire bodies of schools to share, celebrate, and expand the powerful academic practices taking place?

About standards

Depending on the context in which you read these three examples, there is an elephant stomping among these pages that needs acknowledgement: the Common Core State Standards. The purpose of the Common Core State Standards, as noted in their mission statement, is to:

provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers.

As of the time that I write this, "forty-five states, the District of Columbia, four territories, and the Department of Defense Education Activity" have adopted the standards (http://www.corestandards.org/in-the-states). As the implementation of these near universal standards in the U.S. unfolds over the next few years, there is a general sense of caution felt by teachers. Will these standards signal a lasting change in the ways schools prepare youth for active citizenship? Or, will these standards instead become another item in the litany of educational reforms that come and go every few years?

In any case, the problem with the standards stems less from what is in them than from the danger of restrictive interpretations: fears of literature-less and rote-oriented forms of assessment-based education derive from the feeling that school districts may not want to do the work of developing rich, context-based common-core units. In this sense, there is reduced flexibility and agency for the teachers willing to lead at the edge of innovation. Instead of canned units imposed on teachers, we could do better. It should be pointed out that, as of publication, Texas was one of the states electing not to adopt the Common Core State Standards. That fact does not, by any means, imply that Janelle is exempt from the requirements of stringent pacing, organization, and regimentation common within U.S. classrooms. It simply means that the language to which her work adheres differs in syntax but not in intent. Regardless of the shifting politics of who's in and who's out of the Common Core, teachers everywhere are going to have to confront the changing definitions of academics and accountability brought on by the sweeping standards.

Moving forward and not stealing from the kids

Notice across these three examples that the authors do not delve into connected learning as a fad or a hip trend in developing teachers' practice. Larissa's example demonstrates one of the lynchpins of academically oriented forms of connected learning in today's classrooms: educators must not adopt flashy tools and trends simply for the sake of appealing to student interest.

In Larissa's school context, computers are a seamlessly integrated part of the school culture. Her snapshot allows us to see how she moves beyond the typical novelty of computers for powerful, teacher-supported classroom practices. From publishing students' work in public spaces to emphasizing the value of revision with the tools inherent in Google Docs, Larissa's resource suggests connected learners are powerfully mentored and supported when teachers offer responsible guide-lines in their classrooms, which emphasizes the role teachers play in students' learning process.

The rhetoric of games, the cultures of fandom, and the kinds of "geeking out" in which kids may be engaged in out-of-school contexts are in danger of surface-level co-opting when adults try to adapt them for in-school practice. Selwyn cautions educators from co-opting the practices and cultural interests of youth in classrooms. He explains that students "resent having their cultural forms (mis)appropriated into schools" (2006:16). There is a careful balance we must contend with when integrating youth interests into spaces they read as "academic." One goal of classroom-based connected learning is to build bridges between academic requirements and student interests while not swinging wildly from one extreme to another. The case studies in this chapter show that high-interest and highly "academic" learning can emerge respectfully and without pandering to youth.

CHAPTER FOUR: PRODUCTION-CENTERED CLASSROOMS

Clifford Lee, St. Mary's College of California

Learning with Purpose

Bear with me as I reminisce on my experience in a model making elective class during my seventh-grade year. Little did I know at the time, but many aspects of the class comprised variations of what connected learning would describe as a "production-centered classroom."

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In 1991, when I received my second-semester class schedule, I had a vague notion of what to expect for my sixth-period model making class. Several friends had informed me that the class was an "easy A" and that you "made cool stuff" in the woodshop classroom. I'm not going to exaggerate and say it was a life-changing experience, but it did conjure up clear visions of one particular project. I don't remember much about our teacher, Mr. Williams, or many of my classmates, but what struck me was the level of detail I recalled about my rocket car.

Over the course of several weeks, I shaped a collection of balsa wood, a sheath of plastic, some wooden dowels, sponge wheels, screws, spray paint, and a plastic straw into my version of Hell on Wheels. I had recently purchased my first CD, back when they came in 12-inch cardboard longboxes and had an impressive gray AC/DC emblem on the front. I carefully carved out each iconic letter and lightening bolt with my utility knife and used them as stencils for the top of the car. After applying shiny midnight black paint on the exterior of the stretched and sealed plastic exterior, I added my personal imprint with a candy apple red tone over the vertical AC/DC letters. No one would mistake my customized hot rod for one of those plain pinewood derby cars Boy Scouts make.

As I reflect on this experience and wish longingly for that long-lost toy car, I am amazed and a bit perplexed that the project left such an indelible mark on my memory more than twenty years later. I barely remember any facts, content, or other projects during my junior-high days—let alone teachers—but for some reason, I easily can visualize every subtle detail of my AC/DC rocket car.

What Is Production-Centered Learning?

When I read through the *Connected Learning* report's definition of the production-centered classroom, I noticed the strong parallels between that text and my production process. As stated in the report, production-centered classrooms facilitate the use of "[d]igital tools [to] provide opportunities for producing and creating a wide variety of media, knowledge, and cultural content in experimental and active ways" (Ito et al. 2013:8). Or, as John Dewey described this type of learning in a pre-digital era, "doing becomes a trying; an experiment with the world to find out what it is like; the undergoing becomes instruction—discovery of the connection of things" (Dewey 1916). Nearly 100 years ago, Dewey saw the invaluable experience in the process of production.

Given a challenge by our teacher to produce the fastest and most aesthetically pleasing car, my classmates and I dove into the project (or, as *Connected Learning* would describe, a design challenge). We tinkered, explored, tested, and problem-solved our designs. Through this process, I

observed, analyzed, and strategized with peers in designing what we each believed was the most aerodynamic car (circulation and visibility of artifacts). I went through multiple iterations debating and discussing the merits of different designs, while shaping our wood with various tools and sandpaper at our disposal (access to production tools). By engaging in this collective purpose of production, we supported and taught each other how to use various production tools, remixed and traded practices, and even circulated each other's early designs for consideration.

Additionally, I was motivated to dedicate multiple hours toward *my* project, supported by a community of peers who freely exchanged ideas, suggestions, and feedback. I received immediate responses and accolades from classmates and the teacher throughout each workday. Whether I was prepared for the next steps in the production of my car or not, there were plenty of peer and teacher tutorials, modeling, observations, informal suggestions, and/or critical feedback. Through a combination of these various pedagogical learning opportunities, I often received just-in-time instructions. These practices echo many of the other core properties of connected learning: having a shared purpose in an openly networked community that is interest-powered and peer-supported.

While Mr. Williams did not initially seem to play a vital role in the creation of my project, he created and nurtured a community that welcomed and facilitated collaboration. The round tables allowed up to six students to sit facing one another. We freely interacted with one another. Mr. Williams outlined the location of resources and tools around the classroom and provided time-appropriate supports.

Although my car served as my motivator, its importance derived from the process of making. Given time and space to utilize specific tools to create, design, and explore, my peers and I shared knowledge, collaboratively problem-solved challenges, and remixed ideas. Our teacher did not provide linear, step-by-step instructions. Instead, he gave us a design challenge to figure out how to make something we did not know how to make. We saw value in this project because we would be racing our cars as the culminating event. We were motivated by a real application and purpose for our work. Mr. Williams encouraged us to try different ideas, and even though some failed, we learned from these mistakes. In the end, each rocket car reflected each owner's unique design, size, shape, and aesthetics. This project captures the value in creating and nurturing a production-centered classroom.

In addition to the opportunities provided by a physical-production-centered classroom, there are endless possibilities and potentialities in the development of digital artifacts. Imagine if the rocket car project took place today, students could access the multitude of digital resources to watch and produce videos, view and share designs, and engage in participatory communities across political and geographical boundaries. The ease with which one can engage with this authentic audience allows students to further review, remix, and learn from others. This process of production echoes many of the twenty-first-century skills of creativity, intellectual openness, collaboration, and communication in our modern world.

Production Is Not Enough

Despite the primary focus of this chapter, production-centered should not be made synonymous with production. Simply creating an artifact and/or leveraging new and exciting digital tools will not suffice. Teachers must create an environment where students see meaning and purpose

behind what they create, particularly among historically marginalized populations. For young people who have been institutionally silenced, within the classroom curriculum and pedagogy and in their sociopolitical environment, building and nurturing a production-centered classroom are paramount to developing voice, agency, and social and cultural capital. Danielle Filipiak's multimedia work with urban youth in Detroit epitomizes this: students internalized thematic connections between academic text and the real-life experiences of other urban populations. In Jason Seller's English classroom, he offered opportunities for students to synthesize their developing composition skills through Playfic, a web-based tool and community for writing, playing, and sharing interactive fiction games. By leveraging students' gaming interests, Jason provided an authentic audience for their unique storytelling work. In Christian McKay's interactive 'zines, he demonstrates the possibilities of extending traditional literacies beyond the printed text. He captures students' imaginations by modifying a traditional haiku into a multimodal interactive experience, bridging software programming, circuitry, and multiliteracies into one artifact. These three narratives demonstrate the possibilities of a production-centered classroom—where structures support and encourage creating, remixing, sharing, and curating of personally meaningful work.

INTERACTIVE FICTION GAME DESIGN: TEXT-BASED VIDEO GAMES

Jason Sellers, Bay Area Writing Project

I remember when my family brought home our first computer, a used Commodore 64, which by the mid-80s was already a sadly dated machine for a young boy interested primarily in playing video games. I also was disappointed to discover that our Commodore 64 came bundled with only three games, Zork 1, 2, and 3, which are text-based adventure games. Instead of viewing the side-scrolling clouds and verdant landscape of the Mushroom Kingdom in Super Mario Brothers, I had to read a paragraph in order to visualize the setting. Also, the controls were different. Instead of pressing "A" to bounce deftly between a never-ending onslaught of Koopa Troopas, in text-based games like Zork, I had to type commands such as "go north" and "unlock door with key" in order to navigate the game world.

From the perspective of a young video game consumer, it's easy to see why I initially found a game like Super Mario Brothers more appealing than Zork; however, left with no other options, I fell in love with text-based adventure games.

Last fall, I discovered Playfic, an interactive fiction (IF) online community where I could not only play text-based games like Zork, but also create them. These games and platforms that allow players to modify, add, mix, and create gameplay are increasing in popularity, coinciding with the DIY movement.

Based on the clusters of students who swarm around the computers in our library after school, there appears to be an audience for these creative types of games. This trend had me wondering, Would the students in my tenth-grade English class engage with text-based adventure games if these games allowed them to create and explore game worlds with their classmates?

Currently, I serve as the Academic Technology Coordinator at the French American International School of San Francisco, where I coach teachers in grades 6-12. Prior to this position, I taught high-school English for three years, so last fall when a colleague took maternity leave, I was asked to become a short-term substitute for her tenth-grade English class.

This series of IF lessons came as part of an essay-writing unit in which our class studied and composed essays in several styles, including personal, compare and contrast, descriptive, explanatory, analytical, and opinion essays. The focus of these IF lessons was directed toward the improvement of descriptive imagery in our writing. Leading up to the creation of our games, we had analyzed several essays that skillfully used descriptive imagery, such as David Foster Wallace's "A Ticket to the Fair," and had composed a short piece of descriptive writing about a favorite location in San Francisco. We used the Playfic program to create our games.



Screen shot of a typical game design workshop outline To prepare students to create IF games, I first had them play through the tutorials on the Playfic website and explore the games entered in the 2012 Interactive Fiction Competition, which is an annual competition hosted by members of the IF community. We discussed various aspects of the games we played—such as the gameplay, controls, and storylines—and discussed their effectiveness. As a demo, I created a game on Playfic, which I had never done before, and I had students play through it.

Playfic lets students look under the hood of any game by clicking on "View game source," which is a helpful feature because it enabled our class to study and incorporate snippets of code from existing games into our own. I provided students with tutorials for inserting objects, doors, and other game features, as well as a link to a website where they could access the programming manual for Inform 7, the programming language used to create games in Playfic. The Inform 7 programming language reads like English, which I noticed makes it accessible to students who have no prior experience coding.

Because IF lacks graphics, producing an entertaining game was highly dependent on a student's descriptive storytelling ability. One student acknowledged that programming an IF game is difficult; however, he added, "I actually thought it was more interesting doing it this way. It was like a '3-D essay." Writing IF requires students to anticipate the needs of prospective users and make decisions about what descriptive information is important to include and what isn't. If the descriptions aren't effective, players might have difficulty navigating the game or, worse, lose interest. Students wanted to produce a game that their classmates would want to play, so they engaged in many strategies to make their games more appealing, such as using familiar settings (local or popular culture), familiar characters (fellow students or popular culture), and tricky puzzles.

Producing a modern game requires complex programming knowledge and access to advanced software in order to participate. IF games, on the other hand, offer language arts students easier access to game creation in a couple of important ways. First, there is a lower barrier to entry. Because Playfic is web-based, the platform is accessible from any web-enabled device, and because IF games are text-based, there are few limitations in terms of hardware compatibility. And Playfic is free. Participation and support provided by the community are motivated primarily by a passion for playing and creating IF games. Second, there's equity in the way that IF games are distributed, as well as the means of achieving success within the IF community. The most-played and most-commented-on games in player communities typically feature strong storylines and clever puzzles and are within the scope of genres that appeal to the demographics of the community, which tend to

skew toward fantasy and science fiction.

To achieve this social connection, I wanted my students to engage with communities both inside and outside our classroom, which we accomplished by participating in the 2012 Interactive Fiction Competition, sharing our games on Playfic, commenting, and playing each other's games. I noticed that connecting with an authentic community added legitimacy to our work. Students took great pride in creating games that hit the sweet spot of being



Student designing Interactive Fiction game

both challenging and playable, and the feedback that they received often addressed these two concerns. Students also invested time outside of the classroom in order to improve the enter-tainment value of their games, which are still live on Playfic, collecting hits. In my experience, a rising hit counter is a form of feedback that generates a lot of excitement for students—and adults.

To encourage participation, I provided students with the resources for developing a playable game and then focused instruction on teaching them how to use these resources. By focusing my involvement on supporting the use of these tools, rather than showing students step-by-step instructions on creating a game and troubleshooting, they were able to participate more fully in the development process. Problem-solving issues also proved to be some of the best opportunities for learning.

The unforgiving nature of programming languages was a frustrating but valuable experience for some students. Small mistakes in a line of code often would render their games unplayable. One student described a problem she encountered: "I had a piñata in my game, and I needed a baseball bat to whack it. I spent all night figuring out how to have the player pick up the baseball bat and use it as a key to unlock the piñata, which wasn't working, before I finally realized that the game wasn't recognizing the tilde [in the word 'piñata']." Her experience of going through the code, line by line, in order to solve this problem was a valuable lesson in the process of coding.

There were three important takeaways from this experience. The first is to give students space to work through problems with peers or on their own. I noticed early on that stepping in to fix a line of code resulted in students relying on me to supply answers, and I wanted them to access the resources and troubleshoot with their classmates, which I believe is important in maintaining an inquiry-based classroom. During the IF unit, I found it necessary to post the following reminder on our class website: "Remember: Check with a classmate and/or check the IF guides before asking me for help. You learn by making mistakes and troubleshooting. Your brains stop working when I give you the answer!"

Secondly, it is helpful to set less restrictive requirements for the completion of an assignment. I found that focusing students on achieving basic requirements, and then relying on their intrinsic motivation to move them beyond these requirements, worked well in a heterogeneous classroom of students with a diverse array of prior knowledge and experiences. All of the students in our class went well beyond these basic requirements and attempted to incorporate advanced features and complex room arrangements in order to make their games more interesting.

Finally, having students interact with a community beyond the classroom is an important component of authenticity. The day that I introduced IF to our class, a popular and athletic student surprised us all when he revealed that he was familiar with IF games and that he frequently played them on his own. Sharing IF games with players outside of our classroom made the process of creating and playing our games meaningful in a way that is difficult to achieve when students complete an assignment that is only reviewed by a teacher.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/4703

INTERACTIVE 'ZINE: BRIDGING MAKER SPACES, ENGLISH LANGUAGE ARTS, COMPUTER PROGRAMMING, AND VISUAL ARTS

Christian McKay, Indiana University

Artists, in often unique and oblique ways, question the world, our place in it, and our connection to it. They engage in scientific and pseudo-scientific investigations of those questions, and both their inquiries and creative answers are developed in the form of the crafted object. These aspects of the artist's engagement with the world are of fundamental value and should be considered in traditional classroom settings.

The Interactive 'Zine is a project that draws on the creative processes emerging from the intersections of art, craft, design, and technology. It is an example of how these types of creative processes can be an integral part of classroom curriculum to foster deeper learning across academic disciplines. The project embodies these ideas by way of the elements required in making it. A simple six-page 'zine-fold book made from a single sheet of paper, the project serves as a platform through which students work across multiple literacies.

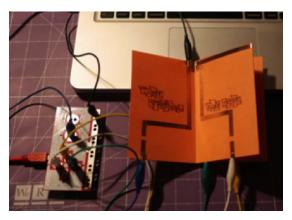
In the Interactive 'Zine, students develop a story around a six-word memoir, haiku, or other storytelling device. Students then develop parallel story elements in the Scratch programming environment, software designed by MIT Media Labs to allow easy access to programming concepts. The

parallel elements in Scratch take the form of animated visualizations and personally crafted audio elements that deepen and enhance a student's story. Additionally, circuits can be drawn into the 'zine with pencil or may be laid in with a conductive fabric like copper tape. Then the book is wired up to a MaKey MaKey board, a circuit board that allows for any conductive object to interface with a computer. The 'zine then can be read and the circuits triggered appropriately to operate the parallel elements in Scratch.

The Interactive 'Zine extends out of a broader project to introduce fabrication laboratory (fab lab) technologies and maker culture to teachers and students at a K-8 school. I assembled a mobile Maker Cart comprised of an industrial machine cart roughly four feet by two-and-a-half feet by three-and-a-half feet. The cart serves as a project work station and houses a laser cutter, 3D printer, vinyl sign cutter, and sewing machine. It also contains various circuit-building components and tools, including soldering stations for "traditional" circuit building and the sewing of computational e-textiles circuits.



Interactive 'Zine folded out



Interactive 'Zine connected to a MaKey MaKey and laptop

The cart is not intended to be yet another incorporation of the latest technologies into schools, but rather is meant to function as a platform through which the teachers can engage in their own creative explorations of the technologies—both high- and low-tech—alongside their students. By developing educational activities that combine design, art, craft, and technology through making, the teachers might have opportunities to locate ways in which the creative affordances and capacities of the tools and processes of fab labs and maker culture can be incorporated into their own curriculum for science, math, language arts, history, sociology, or the arts. The Interactive 'Zine serves as an introduction and a model of the possibilities.

As technology propels us forward into interfacing with objects that carry no inherent meaning through their form, we are confronted with becoming further removed from our understanding of the function of objects beyond their simple manipulability.

As an object that is both handcrafted and technological, the Interactive 'Zine allows children to engage in new interactions with the abstractness of today's technologies. The 'zine lends opportunities to learn new literacies in important, interest-driven ways by allowing children to make connections across multiple literacies. It allows for them to connect technologies with an object they have made. This process provides ways for learners to make connections to and develop understandings of the hidden, abstract aspects of new technologies by constructing their knowledge through making interactive objects that are unique to their own self-expression.

In crafting the Interactive 'Zine, the children work across a broad range of media that allows them to develop language arts skills, learn history and social sciences, advance their design and craft skills, and learn about circuit building, as well as how to program in ways that promote and enhance literacy in mathematics. These skills and knowledge are developed across a range of production-based activities. The children craft books, write stories, create hand-crafted visual art, develop soundscapes in sound editing software (here, they may even make recordings from DIY instruments), and create visual art in Illustrator, Inkscape, and various 3D modeling software to be animated in Scratch.

Rooted in a history of DIY publishing, various sub-cultures, and feminist movements, the 'zine-fold book holds value in the opportunity for children's self-expression to be developed in ways that are unique to themselves and relevant to their own cultural and social backgrounds. There are additionally so many modes of expression across the various media platforms that the 'zine does not conform to any traditional text-based forms of literacy.

For example, Scratch allows the written word to move beyond a single format. And, like the integrated circuit that is drawn into the book, there is yet another opportunity to create individual imagery on each page that is part of a contiguous whole upon opening the book as a poster.

These constant opportunities for the disruption of normative values placed on students create opportunity for equity in learning. These disruptions can take place in the manner of allowing children of non-dominant cultural groups the opportunity to express themselves through their own "linguistic practices, distinct learning styles, and modes of self-presentation" (Ito 2013:23).

The Interactive 'Zine provides opportunities for learners to consciously engage in the creation of their artifact for a public audience. The public entity is developed through the written word that the students share—at a minimum, within the classroom and, more broadly, through public sharing of their Scratch projects on the Scratch website.

Additionally, community connections occur in the contextualization of the writing projects as they may align with issues of equity, social justice, and civic engagement. For example, the project-based school through which this Interactive 'Zine has been piloted has created entire sections of curricular programming around themes of social justice centered on Black History Month. The story-telling projects directly connect to these kinds of thematic curricular events in ways that not only develop a deeper understanding of our history, but also create ways in which the stories of our history may be interpreted, developed, and shared more broadly in the community by students as a unique means of civic engagement.

The connections between the history of the 'zine as a site of personal expression, resistance, civic engagement, and the sharing of projects on the Scratch site—which allows for individuals to re-mix each other's work—create opportunities for children to participate in broader communities that extend their learning beyond the classroom.

Additionally, the Interactive 'Zine has students developing literacy in forms of technology such as programming and circuit building. As the children share their projects, they are participating as actors that deepen and enrich the broader user communities of those technologies.

These forms of participation extend beyond the individual project that is conducted in the classroom. In this way, the children are becoming active participants in multiple communities, and through these community connections, they may be able to find greater value in their activities as learners.

The Interactive 'Zine is a project that allows for children to work across—and begin developing literacy within—a wide range of disciplines, including language arts, history, visual arts, programming, and circuit building. It is a project that allows for these aspects of varied academic disciplines to be learned by engaging in any number of thematic events that can lead to various forms of civic engagement and participation in multiple communities. However, both the benefits and potential pitfalls lie in the complexities of integrating these multiple systems together.

Based on my experience working with youth on the Interactive 'Zine, the ideal entry point for the project seems to be at the fourth grade. The capacity for the students to grasp the principles and tasks involved in bringing all of the elements of the 'zine appears to advance from there. A group of middle-school students with whom I have worked recently even recognized the potential of their 'zine to work with nearly any program while connected to the MaKey MaKey. This particular group of students formed their own collaborative, where they teach themselves, other students, and even some of the teachers how to use Blender, a 3D modeling and graphic animation software. Their level of participation has allowed them to advance the ideas of this project well beyond where the project initially began. I believe this is a testament to the power of this project to deepen the learning experience and broaden the learner's knowledge.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/4885

USING MEDIA TO (RE)CLAIM THE HOOD: ESSENTIAL QUESTIONS AND POWERFUL ENGLISH PEDAGOGY

Danielle Filipiak, Teachers College, Columbia University

Re-imagining education in urban classrooms

Recently, there have been numerous conversations centered on re-imagining education. What does it mean, some ask, to educate young people for a future that is unknown? How will teachers prepare students to navigate multiple contexts while also accounting for the changing communications technologies at our disposal (New London Group 1996)? Alongside these questions, however, there must be a commitment to implementing literacy instruction that is empowering and transformative, especially for marginalized populations whose ways of reading and writing often are dismissed in school settings. As a teacher and teacher-educator, I have been most interested in these inquiries: how youth in urban settings are experiencing shifting literacy land-scapes both inside and outside of school and how teachers are adapting their English classrooms to reflect these changes.

More specifically, I am curious about pedagogical processes and strategies that support youth media production in traditional classroom settings. I have witnessed many students use media tools for some of the same purposes that they put pen to paper or fingers to keyboard: to inform, inspire, criticize, persuade, heal, transform, and connect. That said, while I have encountered several programs that encouraged youth media production in out-of-school contexts, I have rarely seen examples of this kind of engagement happening inside of classrooms. More-

over, the school districts that employed me as a teacher never provided support or training that would help my colleagues or me to develop a classroom that would foster more hybrid conceptions of literacy and, thus, allow it to flourish. I felt compelled to develop a classroom space that would speak to students' immediate and future needs as full human beings. I arrived at the conclusion that the act of production was a significant part of fulfilling such needs because production opens up spaces for imagination and deeper questions. It allows us to create connections between multiple texts and each other. It expands boundaries of participation and pushes us to see ideas from sometimes contrasting angles. It allows us to grow. These opportunities are what led me to create "Me & the D."



Students working on group media project

Arriving at a fuller understanding of this over time, I knew that I had to commit to a different way of "teaching English." Recognizing that I would be working with eleventh graders at a large, Title I public high school in Detroit, Michigan, I decided to design a curriculum that would allow students to produce media around a set of powerful essential questions whose answers had a direct impact on the trajectory of their lives.

My own thoughts about how to put this together and where the questions would center came from a variety of sources: from my prior experiences as a teacher; readings by authors and scholars like Paulo Freire, Ernest Morrell, and New Literacies researchers; watching the ways that community organizations engaged youth; and information I mined from media and research projects my students had submitted in the past. Reflecting on these components, I developed two items that helped articulate and solidify my teaching framework for the year: a snapshot curriculum plan (see Table 1) and a set of essential questions. Each of these were crucial documents that I returned to and fleshed out as the year progressed, and each was informed by several conversations I had with Isaac Miller, a digital media artist who worked for Detroit Future Schools (DFS), an arts education program that weaves digital media, critical media literacy, and project-based learning into the classroom curriculum. Isaac helped me in developing curriculum and lesson plans and also came to my classroom once a week for an entire school year to help students develop and publish their media projects.

	DISCOVER	CREATE	RESIST	TRANSFORM
TEXT	The Crucible	Night	Things Fall Apart	The Bluest Eye
MEDIA	Small Projects: My Neighborhood Tells Me, My Relationship With Education- Photojournalism project	Me & The D Digital Self Portrait	My Homeland	Me & The D Final Research + Media Project
MEDIA SKILLS	Interviewing Skills, Analyzing Media Content, Critical Dialogue	Digital Image Design using GIMP (Open Source)	Audio & Video Recording, Story- boarding, Camera Shots	Audio & Video, Editing, Post-pro- duction
WRITING FOCUS	Narrative	Narrative/ Analysis/Test Taking	Literary Analysis	Research Papers

"Me & The D" Curriculum Layout | Previously published in English Journal (Filipiak and Miller 2013)

The three essential questions that we created to guide students through the texts and media projects were as follows:

- What is the relationship between language and power, and how does that manifest itself in my life?
- What role does education play in the health of a community?
- How can I use my literacy practices to re-write my world?

Practicing transformation

By marrying action-oriented themes like discover, create, resist, and transform with powerful reflective questions, my hope was that students would internalize this model of praxis (Freire 1970) and be able to transfer it into other areas of their life as they saw fit. Transformation, as noted in the curriculum snapshot, was the last theme for the year, one that we actively worked toward. The media production allowed youth to not only learn new technical skill sets, but also provided a space for "practicing" transformation. In addition, it helped them make deeper connections to the texts we were reading in class.

For instance, when students created digital self-portraits that reflected how they saw themselves in one of the three essential questions while we were reading Elie Wiesel's *Night*, they noted the detrimental impact that propaganda has on marginalized groups, pointing back to the power of messages contained in images. On several occasions, students described that composing images of themselves helped them understand this influence more fully. One student even expressed, "I can never see the world the same again. There are messages in everything, and these messages impact different groups of people in different ways. What seems normal to one person might be oppressive or negative to another, like the Jews in the Holocaust." Building from the media projects and discoveries like this, Isaac and I were able to introduce more activities shortly afterward that would develop students' critical media literacy skills.

Building off of the theme of struggle and noting that such struggle in Queens, New York birthed hip-hop, Isaac developed a lesson where he asked students, "How do we turn cycles of destruction

into cycles of creativity?" He posed this question later in his lesson as it related to news coverage of students' local neighborhoods, tying our anchor text, media projects, hip-hop, and the state of Detroit together. This pedagogical positioning demanded that students be both hopeful and critical: hopeful in the sense that they believed that they possessed viable solutions to the problems that surrounded them and critical of the narratives, institutions, and processes that suggested they didn't.



Students sharing their visual response to prompt, "Where Do You Find Hope in Your Community?"

Isaac's question pushed students to think about self and community transformation, and it came at a time when they were ready and initiated interest on their own. Classroom moments like this, best demonstrate our collective and ongoing commitment to equity, as students were asked to explore new options for opportunity, healing, and work. In Detroit, held up as the poster-child for post-industrial decline, we cannot think of a more important place to invest in such re-imagining nor a better group of young people from whom to draw inspiration.

Becoming different students

While literacy achieves many purposes, I knew it was important to center on literacies attached to students' immediate context and needs. To this end, I recruited a team of people who could help me co-construct, along with students, experiences that would provide multiple entry points for student participation. I befriended the custodian who had access to the laptop carts that our entire school shared; the technology coach who worked at the Apple store at night; local community artists and activists who had a historical and cultural knowledge of the neighborhood; and professors at local universities who possessed valuable research skills and expertise. These social connections helped students see firsthand the many different ways individuals and groups can contribute to a larger purpose. Through these interactions with individuals possessing a variety of skills, students discovered they preferred certain ways of participating.



Students preparing to listen to community members from the Ruth Ellis Center share their action research project and documentary while local hip-hop artist Invincible records the presentation and Detroit Future Schools artist Isaac Miller transcribes

Some students connected with the technology coach who taught our class camera shots and storyboarding techniques, and others enjoyed learning what a "sociologist does" and the technical aspects of the research process. Still others enjoyed trying on new roles as "critical community historians." Approaching each task or text in a collaborative spirit, students gained exposure to different patterns of learning, and in doing so, were pushed to become different kinds of students. In this light, I was able to see firsthand how centering production afforded opportunities for students to construct affirming identities, make authentic connections to classroom texts, and develop new and specialized technical skill sets. These observations, in turn, required me to be a different kind of teacher.

Becoming different teachers

Providing the requisite literacy skills that will allow for full participation in the global economy and civic life means that teachers in urban settings in particular must make courageous pedagogical decisions that look and feel very different from what current mandates require. In many states and particularly in the current era of Common Core State Standards, teacher accountability measures have been implemented that rely heavily upon students' performance on standardized assessments, and most teachers working with marginalized populations tend to be pressured to "teach to the test" and little else. To place this agenda to the side in order to usher in new ways of seeing literacy pedagogy is courageous. It means asking different questions about how and why students read and write across varying contexts, and it means acknowledging the ideological underpinnings of literacy and literacy instruction, remaining reflexive enough to consider how assumptions drawn from such may or may not serve the students who are in front of us. Before stepping into the role of preparing students for "unknown futures," it is important we acknowledge and draw upon the wealth of knowledge and ways of knowing that young people already bring into the classroom. In my case, I knew that while students were not performing well on standardized exams, they enthusiastically produced personally meaningful multimedia artifacts that served real purposes. They wrote to give voice for countless others who were silenced. They shared multimodal pieces that pushed against dominant narratives of them and their community. In this process, the work in "Me & the D" facilitated collaboration among classmates with a shared purpose. It created unique, new learning opportunities across time, places, and people. These new media literacies amplified opportunities for students of diverse learning styles to develop agency and power.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/3400

CONCLUSION: PRODUCTION-CENTERED CLASSROOM

The three narratives were conscientiously selected to highlight the breadth and depth of learning that is possible in a production-centered classroom. Although dissimilar from one another in their contexts (student backgrounds, learning environments, and geographic and cultural locations), the narratives demonstrate all aspects of the core properties of connected learning: production-centered, shared purpose, and openly networked, as well as the three crucial contexts for learning: peer-supported, interest-powered, and academically oriented.

Despite the wide spectrum of products students produced, it is worth noting the commonality among the classrooms: framing the production of an artifact with a clear purpose and with an authentic audience in mind. Like my reflections of the rocket car project, each one of these narratives clearly outlined a definitive purpose for the production of their work while creating an audience for their work beyond the classroom. For Jason Sellers' students, not only did they share their Interactive Fiction games with their classmates, but they had a built-in audience through the larger Interactive Fiction online community. Additionally, Jason deliberately structured the project with students' participation in the 2012 Interactive Fiction Competition and noted, "Connecting with an authentic community added legitimacy to our work." Furthermore, by adding this interactive audience component to their work, students become more attentive to the "needs of prospective users and make decisions about what descriptive information is important to include and what isn't," as Jason explains. Christian McKay's interactive 'zine took a similar approach in leveraging the ease of public sharing with Scratch's powerful web presence. Although audience members may not have experienced the totality of the students' 'zines, still they could capture the digital visualizations and/or soundscapes of their Scratch program and code to potentially mash up or remix. Danielle Filipiak's "Me & The D" project clearly highlights the importance of a project with genuine purpose and personally meaningful significance to the creators and audience of the work. By framing her curriculum around locally and historically based contexts with participation by a wide swath of individuals, Danielle ensured that students did not have to look far for the purpose of their work. What these three narratives have shown is that while sustaining a production-centered learning ecology is a welcoming endeavor, housing that work with real purpose means student motivation, interest, pride, and investment in the work will be exponentially increased.

An important dimension of a production-centered classroom that requires further examination is the role of the teacher in facilitating an optimal learning environment. Like Mr. Williams' approach in structuring peer support, Jason discussed his own recognition in the importance of developing an inquiry-oriented classroom. His emphasis on providing students with resources and instructions on how to use resources, rather than step-by-step instructions on game production forces students to learn the important skills of problem-solving and resourcefulness. His example of the student who dedicated an entire night to troubleshooting her Interactive Fiction game taught her the invaluable and core concept of writing code with precision and accuracy. Jason's reflection led to his institutionalizing this practice, "Remember: Check with a classmate and/or check the IF guides before asking me for help. You learn by making mistakes and troubleshooting. Your brains stop working when I give you the answer!"

Mashing together the worlds of maker spaces, art, English, and computer science, Christian's

interactive 'zine genuinely embodies the multimodal world of a production-centered classroom. By bridging the tactile process of laying copper tape and connecting circuits on a MaKey MaKey with the object-oriented programming in Scratch and the traditions of a simple 'zine, Christian shows us the vast possibilities for interdisciplinary work thinking. By tapping into familiar academic literacies (haikus) with the unusual (MaKey MaKey and Scratch), students expand and open their creativities to new ways of seeing, reading, hearing, and touching the world. Seemingly built into the interactive 'zine, students learn through multiple iterations of trial and error while attempting to create their multimodal artifact. Through this work, Christian reminds us of the importance of play, exploration, and multisensory experiences in capturing the interests of all students, especially those whose communication styles differ from those in traditional academic settings. The hi-tech and lo-tech worlds are seemingly blurred, and the only limitation of the interactive 'zine is one's ability to dream.

Marrying academic texts and skills with new media production and culturally relevant content, "Me & the D" stands in sharp contrast to the scripted and standardized curriculum directed to our students, particularly historically marginalized populations. Danielle shows us the importance of creating curriculum that speaks to the lived realities and passions of urban youth, incorporating the traditional academic expectations and twenty-first-century skills necessary for academic success. Her production-centered classroom demonstrates how powerful a curriculum can be when a teacher thoughtfully and skillfully weaves a community's cultural wealth with the academic expectations while utilizing youth-oriented new media tools. As she described, "production opens up spaces for imagination and deeper questions. It allows us to create connections between multiple texts and each other. It expands boundaries of participation and pushes us to see ideas from sometimes contrasting angles. It allows us to grow." Notice how she resourcefully invites different "experts" to support students' recognition of different forms of participation and civic engagement. Not only does this transform students' perceptions of those who hold knowledge, but it pushes them to take on their role as knowledge producers, or as Gramsci would describe, "organic intellectuals." Danielle shows us that a production-centered classroom should not be limited to its physical sense but should include intellectual and conceptual production of ideas.

Throughout this chapter, we have pushed against the notion that a production-centered classroom is one that utilizes the newest gadgetry or digital tools. Instead, we have examined the structures and systems that produce and support an environment where students are challenged with creating things they do not yet know how to make; where they use their creativity to explore and tinker; where they make multiple attempts and fail but utilize resources to problemsolve; and where they spend hours beyond the minimum standard to complete a project. What possesses students to engage in these endeavors? Our three narratives clearly illustrate the importance of the role of the teacher. By skillfully framing the project with a genuine purpose, an authentic audience, and a willingness to engage in the messiness of this form of learning, students find value and relevance in the work they do. Students no longer see the classroom space as one in which they are "playing the game" of schooling but become intrinsically motivated to create, produce, collaborate, share, and reflect.

CHAPTER FIVE: OPENLY NETWORKED

Bud Hunt, St. Vrain Valley School District, Colorado

Seeking Connection in a Time of Ubiquitous Networks

In 2005, I began to discover an openly networked world beyond my classroom that was comprised of real teachers just like me who were documenting, questioning, and sharing about their practice online. They wrote blogs and recorded podcasts about the real events of their classrooms, and they asked questions and made statements that encouraged conversation. In their attempts to make sense of their teaching situations, they published concerns and questions, exploring them with others who used the power of the open Web to find one another and help make the troubling parts of teaching more bearable. In the process, they were also creating learning opportunities for themselves and the interested others who were eavesdropping their way along their posts, comments, and conversations.

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I soon became one of those teachers, writing frequent blog posts and sharing podcasts—which I often recorded from my car as I commuted back and forth to my classroom—that discussed issues from my work as a high-school language arts teacher. I began to conduct lots of lesson planning on my blog, explaining my way through complex challenges for the people who may have been (or likely, were definitely not) reading along. But the audience for my contributions was complicated. I wasn't writing just for others, and I wasn't writing only for me. I was engaged in what the connected learning community would come to call "openly networked" reflective practice. In *Connected Learning: An Agenda for Research and Design*, we read a description quite similar to my own experience:

Today's digital networks provide new opportunities for learners to access a wide range of knowledge and resources across the boundaries of school, home, and after-school settings. They also allow learners to make their own work and achievements visible across these settings. (Ito et al. 2013:76)

I improved as a teacher and as a learner through lots of little exchanges, wonderings, and posts about what was happening in my classroom, what I wanted to happen, and how to bridge the gap between the two states. While the authors of the *Connected Learning* report focus on what students should and might do as learners, there also is considerable value in teachers and other facilitators of learning to consider how they might use these principles as learners themselves. As a blogger describing my teaching practice, I became a student and sometimes teacher of others who were engaged in similar pursuits as I/they worked to document and share my/their practice. In a sense, I was a student like the ones described in the report, finding value in the wealth of open resources I was both consuming and creating via my writing and sharing online.

And, a funny thing happened. I discovered the serendipity of openness. Specifically, I learned that opening up one's practice for scrutiny and observations created lots of opportunity for collaboration, discovery, and connection with and to others. I ended up building a loose network of collaborators and trusted ears, eyes, and voices I could lean on to help me become better at my craft. We open Web sharers were building an open network of learning about our work together, one that anyone could follow along with or create alongside. The power of the Web made it easy for us to find each other and learn together, but what we were doing alone together was bigger

than the Internet. Seeking connection, meaning, and a better sense of purpose has been a human pursuit far longer than the Internet has existed to support these practices, but the ability to instantly publish to anyone who might wish to follow along was a powerful amplifier of my work.

Missed connections are easy on the Web: we can't find everyone that we could possibly learn from and with, but we can find enough people who share our passions and can build loose networks to solve problems.

The connected learning principle of "openly networked" is one that seems simple on the surface but is worthy of further unpacking. As defined by Ito et al.:

Connected learning experiences support a range of activities that are openly networked, which have these features:

- Networks are cross-institutional
- Multiple points of entry and outreach
- Open assessments, badges, and certifications
- Open access and IP (2013:77)

Further, the report says that openly networked experiences and environments are largely about the technology that enables interaction across specific contexts:

This can mean accessing online educational resources at home and school, uploading selfproduced content to shared learning spaces, or receiving credit for self-directed learning in school or a workplace. These affordances of digital and mobile communication networks greatly expand opportunities to connect learning experiences and outcomes across the oft-fragmented settings of a young person's life (Ito et al. 2013:76).

But certainly the principle is bigger than the Internet and the places on the Internet where we can find, share, and connect with others from whom we can learn. Openly networked experiences are about how and where and when we can find each other and connect. While certainly the technology of our age makes it easier than ever before to connect, connected learning experiences do not require the Internet or digital media to be pure and true connected learning experiences.

If teaching is a process of teachers loving what they do in front of their students as a way of conveying passion and excitement and curiosity, as one of my favorite teachers describes, then the connected learning principle of openly networked is about creating opportunities for students and teachers to discover those people who love what they know to share that love with others (Rogers 1998). While other sections of this book focus on the "love" itself—the interests and passions that drive connected learning—the principle of openly networked is all about connecting the love across contexts, locations, and institutions. Openly networked learning experiences create multiple opportunities for people to discover them, participate in them, and then create and share their own experiences and opportunities for others, too. But to understand that and to create those experiences, we need to unpack the notions of both openness and networks.

Openness

To be open isn't necessarily to reveal everything to everyone. Open classrooms aren't places where every moment of activity is shared with anyone who wants to see it. There aren't video cameras recording and distributing every moment of the learning experience. Thoughtful teachers choose intentionally what, when, and how they share what they are curious about and what demands their students' attention. In my work as a professional developer working to help teachers and students better understand educational technology, I've attempted to describe two principles that guide my habits of openly networked teaching and learning.

Purposeful transparency

The first concept that guides my work as an online wonderer is that of purposeful transparency. The question I use to describe this concept is: "How do you work to make your actions and rationales visible to all?" Some critics of open Web sharing will claim that "no one cares what you ate for breakfast," an early critique of the use of Twitter, Facebook, and other status walls to share seemingly mundane actions. The addition of the adjective "purposeful" exists to bring a sense of deliberateness to one's attempts at transparency. Raw data are sometimes useful. Intentionally shared and crafted data become information as the person doing the sharing attempts to convey meaning and purpose through that sharing. In my uses of shared media like Twitter and blogs, I don't write about any old thing that happens; I attempt to frame my postings and wonderings about the questions, ideas, and practices with which I struggle and situations to which I wish to give my attention. Being open on purpose requires constantly negotiating what I feel like sharing with thinking and crafting around what, why. and to what ends I'm seeking to share.

Productive eavesdropping

The second concept I encourage potential open networkers to consider when they are thinking about using the Web for learning is that of "productive eavesdropping." How, I ask, can you help others to see into your conversations and work? To be an openly networked teacher, you must create spaces, opportunities, and experiences for others to follow along in your process. These moments and opportunities are the nodes that can bring new partners, colleagues, or thinking partners into your work. The sharing that you can do in online spaces is a way of inviting others into what's being shared and can serve as an invitation to others to get involved as a reader, commenter, or participant in the learning and experiences being shared.

At a recent professional development experience I facilitated, I asked the participants at the end of each day to write short notes about their learning from that day. These notes, posted to a blog via email, became points of discovery for others interested in the event and the learning taking place. Participants were surprised to discover that educators in other states were paying attention to their work. This discovery added a level of importance to their experiences but also created moments of interaction with interested strangers who asked questions, shared their own experiences, and became partners in the learning as they accessed and commented on the blog. One cannot become an openly networked learner without creating these places and moments for interaction.

Networks

Digital media, as well as analog media, can serve as nodes in a network of learning. The Internet makes it easy for people to find each other, but the Web is not essential for this sharing and interaction. Classroom teachers have used bulletin boards, wire baskets, file folders, photocopied student work, and many other analog tools to accomplish the creation of openly networked classrooms on smaller scales. What's important isn't the Internet, but the Internet certainly improves the chances of random discovery as resources, conversations, questions, and ideas are available on a global platform. Ensuring that everyone has access to this platform, as well as quality digital tools to read and create for the space, is essential as the world advances toward a digital global conversation.

In this chapter, I present stories of teachers and institutions who are attempting to build these networks of learning across their specific contexts in open and public ways as they work to cre-

ate better experiences for the learners they serve. Gail Desler shares her work to connect classrooms and experts around issues of social justice and community involvement. Adam Mackie and Jenny St. Romain explain some of the many community connections they helped to facilitate while helping students explore their heritage, as well as their local history. Mike Murawski, a museum educator, talks about his attempt to create an open network to support his role as a teacher of teachers, as well as the public in his museum. In these examples, the use of an online or digital tool is helpful to making the learning experience openly connected, but it is not required. As you explore the stories, look for moments of networking across contexts, as well as times and places where the participants shared their learning in ways that made it accessible to others.

SUPPORTING "CHANGE WRITERS" THROUGH A CONNECTED LEARNING LENS

Gail Desler, Elk Grove Unified School District

In my current job as a technology integration specialist for a large public school district (Elk Grove Unified School District in Elk Grove, California), my passion is taking student voices beyond the walls of the classroom, a passion ignited through my work in a number of our Title I schools. Similar to high-poverty schools in rural regions, our suburban, low-income neighborhoods lack the public transportation options necessary for students to explore, connect, and share issues, challenges, and achievements beyond the confines of their school community. So whenever teachers invite me into their classrooms, I bring with me an invaluable low-tech tool: my staple remover. Whether it's powerful writing samples or incredible art work, once the student work is off the walls, we can start the conversations on possible tools (e.g., scanner, camera, or voice recorder) and programs (e.g., blog, wiki, podcast, or movie making) to move student-created content from the classroom out into the local, national, or global community.

In 2008, I assumed the coordinator's position for our district's Enhancing Teaching Through Technology (ETTT) grant. Year one of the grant targeted fourth-grade classrooms at three of our Title I schools. I happened to be at one of the sites, Prairie Elementary, providing some technical assistance the afternoon the fourth-grade team was planning for a Day of Tolerance, an event they hoped might transform the hearts and minds of their students, extending well beyond a single day.

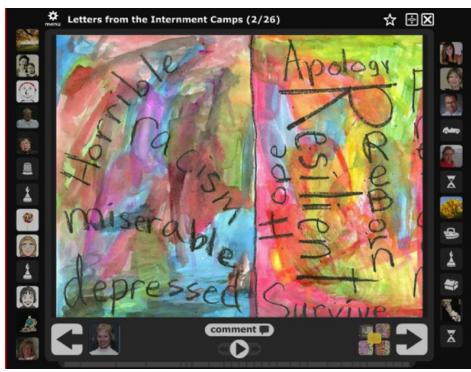
The students had read a short piece about Anne Frank in their English/language arts anthology and would be watching a movie on Anne Frank as part of the Day of Tolerance events. The teachers decided to weave into the day a local story of intolerance: the story of the forced removal from the West Coast of more than 120,000 citizens of Japanese heritage following the bombing of Pearl Harbor. In a community that had once been the heart of California's strawberry farms, justice failed, changing overnight and forever the history of Elk Grove. I suggested they invite community activist and former internee Marielle Tsukamoto as a guest speaker.

During the Day of Tolerance, as the students listened to Marielle share her childhood memories of exclusion and discrimination, they gained a sense that history does not happen just in textbooks; it happens in their own communities. They also learned how quickly history can change when citizens fail to speak up for the rights of others.

On my next visit to Prairie Elementary, I entered fourth-grade teacher Halie Ferrier's classroom and was immediately struck by a stunning display of student artwork and writing stapled across one wall of the classroom. The display represented the students' responses to *Letters from the Internment Camps*, a writing prompt Halie crafted to help students imagine what it would be like if they had been removed from their homes and sent to an internment camp. The students were to compose a letter to a best friend, imaginary or real, describing what had just happened to their family. The accompanying watercolor/crayon resist artwork was a paper divided in half with words of tolerance and acceptance on one side and intolerance on the other side.

The student work was impressive and definitely worthy of a broader audience than a handful of occasional visitors to the classroom. It was a perfect project for VoiceThread (voicethread.com), a free cloud-based program that allows users to narrate images and invite a worldwide audience to view and leave comments. I handed Halie my staple remover, and before the end of the school day, the artwork was scanned and uploaded to VoiceThread, and each student had recorded his or her letter.

Within a matter of days, responses to the Letters from the Internment Camps VoiceThread began trickling in. Students, teachers, parents, and the community at large contributed content and compliments. Several former internees shared their memories of the camps. A project that started as students creating historical fiction now included primary-source accounts. For a classroom of students too often confined to the physical boundaries of their neighborhoods, technology had leveled the playing field, providing them with a global microphone for speaking out against social injustice, creating a powerful example of what writing for change looks and sounds like. To date, a project initially stapled to, and limited to, the walls of a fourth-grade classroom now has more than 75,000 visits and hundreds of comments from an authentic, worldwide audience.



VoiceThread created by Halle Ferrier's fourth graders on letters from the internment camps

Across the hall from Halie Ferrier, Lesley McKillop's students were comparing and contrasting Anne Frank's Holocaust story to Marielle Tsukamoto's internment story. While listening to these fourth graders connecting the past to the present, as they grappled with issues of intolerance in their own lives, I knew they were having some of the same conversations that my National Writing Project colleague Pam Bodnar (Northern California Writing Project) and her eighth-grade peer mediators were having two hours north of Elk Grove at Chico Unified's Marsh Junior High. With new technologies making it increasingly easy to connect students in different physical locations, I suggested to Pam that we introduce her middle-school students to Lesley's students.

My role was simple: I would provide whatever tech support was needed to get online conversations started. With a little help, Lesley set up her classroom blog. The Day of Tolerance art and writing pieces that she had stapled to the walls of her classroom started making their way to the blog and into interactive discussions with Pam's students. The two groups started connecting as a communi-ty of writers, and within a matter of weeks, they began to refer to themselves as "change writers."

Before the school year ended, the two sites connected via an interactive videoconference for a "change writers" meet-up. Both groups had much to share. What began as a discussion about bullying issues at their own sites evolved into a discussion about the consequences of targeting any group of people for forced removal from their communities. The fourth graders were clearly knowledgeable about the internment of Elk Grove's Japanese-American population. The eighth graders shared what they had learned from interviewing three Holocaust survivors now living in the Mendocino region of northern California.

As Lesley, Pam, and I later reflected on what transpired during the forty-minute video conference, we concurred on the importance and possibilities of using technology to connect young learners in powerful, impactful ways.

Five years later, the "change writers" journey continues with an expanded network of teachers, students, and community activists joining in the conversation. As part of the California Writing Project and Common Sense Media's 2013 California Digital Citizenship Month (www. commonsensemedia.org/california), another esteemed National Writing Project colleague, Nata-lie Bernasconi (Central California Writing Project), and I created the *Upstanders, Not Bystanders VoiceThread* (https://voicethread.com/share/4134620/).



Title slide of the Upstanders, Not Bystanders VoiceThread

Similar to *Letters from the Internment Camps*, the *Upstanders, Not Bystanders* VoiceThread is quickly becoming a tool for connected learning by inviting and honoring stories of what it means to cross the line from bystander to upstander. In listening to the growing bank of contributors, it becomes clear that across generations and geographic and socio-economic divides, all voices matter. Whether the message is from a kindergartner—such as Madeline who stated that "we need more upstanders on the playground to be nice to people"—or from humanitarian Carl Wilkens—the only American to remain in Rwanda during the 1994 genocide, who talked about a group of women who were "12-minute upstanders"—each story contributes to the overall purpose of the VoiceThread.

Five years later, Pam Bodnar remains a change writer co-traveler, bringing along a number of her previous eighth graders, who now, as high school students, have broadened their commitment to making a difference at their school sites to making a difference in the world. I encourage you to listen to Pam's *Upstanders, Not Bystanders* thread (opening screen), as well as her former student Bailey's thread (first student, left-hand side, on the high school screen).

Former fourth-grade teacher Lesley McKillop (now a fellow teacher consultant for the Area 3 Writing Project) also continues on the change writers' journey, expanding the change writers' reach to a new grade level. This year at a different school and now teaching kindergarten, Lesley has launched a dynamic *Upstanders, Not Bystanders* program. Each day, her kindergartners nominate an upstander, supplying not only a name, but also the justification for the nomination. Lesley's young students are becoming fluent and fearless in speaking out for others, frequently identifying not only a *bully* and a *target*, and also holding any *bystanders* accountable for their lack of action. Through their actions, their artwork and their voices, they are already becoming skilled change writers.

Learning across settings

When I reflect on the change writers projects, I am struck by how they make visible the openly networked connected learning principle that "learning is most resilient when it is linked and reinforced across settings of home, school, peer culture and community" (Ito et al. 2013:76). From the initial *Letters from the Internment Camps* project to the recent *Upstanders, Not Bystanders* project, I marvel at the many ways technology can support and promote connected, global learning environments. Through blogging, movie-making, VoiceThreading, and video conferencing, students, even primary-age students, are demonstrating their ability to grapple with real-world issues. When students can feel they are a part of something bigger than just themselves, the entire dynamic of their sense of motivation and purpose takes a quantum leap forward.

Students as Upstanders, Not Bystanders

Of the many common threads between the initial change writers projects and the *Upstanders*, *Not Bystanders* project, the theme that stands out is the role of the bystander, across historical events, geographic boundaries, and school yards. When students are invited into shared, connected conversations on the potential of upstanders to make a difference, they begin to recognize the power of change writers and the very real possibility of a small group, or even of a single person, changing the world.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/272

LEARNING ALONGSIDE: OPENLY NETWORKED STORYTELLING WITH SOCIAL JUSTICE IN MIND

Adam Mackie and Jenny Putnam St. Romain, Colorado State University Writing Project

Connected learning involves making deliberate choices as educators—choices that force us to think about how students are connected to the world around them in ways that simply did not exist fifteen years ago—while also considering existing community and historical connections that could be made stronger through exploration.

We are only at the brink of bringing this concept of connected learning to the forefront of how we educate our kids, although the Colorado State University Writing Project (CSUWP) began this exploration in the summer of 2009. The connected learning experience we describe emerged from a partnership between a professional development opportunity for teachers— Teaching with Tech (TwT)—and a summer writing opportunity for local elementary English Language Learners—Saving our Stories (SOS). By the summer of 2013, this journey had developed into a sneak preview of what learning looks like in an "openly networked" enterprise.

Resilient learning

In framing connected learning, we see a fundamental question at work: "What is the experience we want kids to have?" (Yowell 2012). For the planners of SOS, the easy answer is that we want students to record and share their own stories. The more complex answer rests in the knowledge that in order for learning to be resilient on the onset of this connected, social, digital age, we must go beyond the traditional telling and publication of stories that have, up to this point, largely been limited to the resources within our traditional schoolroom. We must thoughtfully consider how digital tools can work to link our learning at home to our learning at school to our learning in the community. With this in mind, we set out to build, shape, and navigate two kinds of networks—one of location and one of expertise.

Linking identity, curiosity, and social connectivity

First, we considered the location of our learning spaces, recognizing that these spaces should be designed to enhance students' authentic learning experiences they already are getting in their classrooms. In the case of the SOS experience, the spaces were chosen keeping in mind that these students' identities are entrenched in their experience as English Language Learners; as soon-to-be fifth graders; and as sons, daughters, brothers, sisters, friends, cousins, grandchildren, and citizens of Fort Collins, Colorado. So, the storytelling began in a familiar setting—their school classroom. After listening to Gary Soto's "Ode to la Tortilla" (1992), students crafted their own odes: to soccer balls and tennis shoes and hairstyles. These odes were recorded as podcasts and shared with their classroom community.

After learning about film techniques like close-ups and landscape shots, students created a five-frame storyboard telling about a time when it was hard to say goodbye. Armed with low-tech tools like pencils, paper, crayons, and markers, students drafted the storyboard and then photographed each frame, eventually publishing an iMovie that they shared with one another.

Beyond the classroom: Deliberate choices about learning spaces

At this point, students were ready to consider how they see themselves in their local community—beyond the schoolroom. To that end, participants went on field trips throughout the summer program in an effort to form social connections with the local community and "share practice, culture, and identity." They first visited El Museo de las Tres Colonias, a local museum housed in a small adobe brick home that celebrates the Hispanic heritage in Fort Collins. At El Museo, the children used iPads to record an adobe home containing the history of a local Hispanic family that lived in the house during the twentieth-century. They saw pieces of history of a family that worked in the sugar beet fields and learned about racial discrimination against Hispanics and other aspects of daily life. The group then heard about the realities of migrant farm work in the sugar beet fields.

Students heard stories about the joys and pains of Hispanic pioneers in the area. They learned the Hispanic community in Fort Collins was discriminated against, that they were hard-working sugar beet farmers, and that they had large, vibrant families who left a mark on the local community. Through in-person conversations and the exploration of museum assets, students also began to see themselves and their heritage in these stories. The students left this learning space with a couple of missions to accomplish that would begin to unlock more storytelling: they were to go home with questions in mind to investigate their own family's history. Later, students headed to another learning space, the Fort Collins Museum of Discovery. Here they were introduced to the job of an archivist and the resources available at the archive: photos, maps, yearbooks, phone books, scrapbooks, diaries, and lots more. The children analyzed the old pictures and wrote about the pictures in journals or mission logs. They toured the museum, beginning with the "People on the Move" exhibit, which highlights the history of Fort Collins. Using iPads and iPhones, students recorded and photographed their experience at the museum and then used these photos and recordings to unlock fictional stories written in the form of odes and vignettes. The students were involved in the process of exploring the resources of others, connected through and to discovery of themselves across multiple contexts and environments. Their stories became new connections in these networks, and they noticed connections between the two spaces and their stories. One student recognized a man that shared with the group at El Museo about working as a migrant farm worker in the exhibit at the Museum of Discovery. This degree of full participation at local museums rippled into later conversations held in the classroom. Throughout the summer projects, participants aimed for the objective of fully participating in their learning and preserving their stories and experiences with each other, with their teachers, and with their families.

The SOS group debriefed on all the observations of what they saw, what they heard, what they thought about, and what they felt. Students not only used digital technology to record their experience, they also used cardboard. Over the course of the three-week program, a cardboard city was constructed that traced the students' understanding of the past, present, and future of Fort Collins. Students saw their community and civic life come to life when they constructed the cardboard replica of the city of Fort Collins. The sound of saws on cardboard, interrupted by the sounds of student conversations debating the best design, filled the learning environment as students erected buildings they learned about on their travels and explorations—from Fort Collins City Hall to their own houses and apartment buildings. Students actively engaging with the community and recording their experience better connected them to the city where they reside.

Changing the face of expertise with connected learning

Students acquired stories in nontraditional learning spaces and connected to adults beyond their classroom teacher. Accompanying the eighteen ELL fifth-graders enrolled in the SOS program were ten classroom teachers registered in the TwT professional development, three university educators, and one documentarian—an expert in real-life story telling. This student-teacher/kid-adult atmosphere produced a rich learning experience for all participants. The students involved agreed to tell their stories through the lens of spies—investigators who are on a mission to unlock stories that needed to be told. The educators had a dual purpose in this endeavor: they agreed to serve as guides or mentors to help students unlock their stories and to explore and build links between connected learning and digital literacies. What we did not agree on, but what inevitably arose, was the changing face of expertise in the classroom. Expertise in the networks created in the project existed throughout the network, no longer owned by the teacher alone, but shared among teacher, student, and community members. These student-directors became the mentors as the adults learned from and with students about learning with technology in a connected age.

This connected learning journey was empowering for students and teachers alike. The students did indeed save their stories—stories inspired by incorporating their home and community. Teachers left knowing that deliberately incorporating connected learning practices—and, specifically, the creation and strengthening of networks of learning and sharing beyond the classroom walls—results in robust learning.

Openly networked in digital and analog ways

The students and teachers in this work became fully webbed to each other, their communities, and their families throughout a summer of exploration and story creation. To use the noise-less, patient words of Walt Whitman, they "surrounded" themselves "in measureless oceans of space, ceaselessly musing, venturing, throwing,—seeking the spheres, to connect themselves." With iPads and maker's minds, the children and teachers not only connected with local history and culture, they also spun a web of knowledge and learning to later be accessed.

They will play back their experiences from El Museo de las Tres Colonias and the Fort Collins Discovery Museum in traditional and digital forms. The students will continue to witness how lines of learning cross from inside the walls of a school to local community platforms, and these threads will follow them home. Whether the students realize it now or not, their openly networked learning provides them a bridge of prior knowledge where they can eternally return, and as Whitman says, "Till the bridge [they] will need, be form'd—till the ductile anchor hold; Till the gossamer thread [they] fling, catch somewhere..."



Students use digital tools to capture their stories at El Museo de las Tres Colonias

Link to Digital Is Resource: http://digitalis.nwp.org/resource/4414

OPENLY NETWORKED LEARNING IN AND ACROSS ART MUSEUMS

Mike Murawski, Portland Art Museum

What happens when educators converge around shared interests and purposes in the spaces of museums? How can museums more effectively build diverse networks of educators that support our teaching and learning practice? Faced with the complex landscape of formal and informal education in the twenty-first century, museums across the globe have been rethinking their role as actors within their educational community. Not only are museum galleries increasingly becoming open spaces in which communities of learners can connect and intersect, but museum professionals also are developing online spaces of exchange and reflective practice.

As a practicing art museum educator, as well as a museum blogger, I find myself constantly in the process of discovering how "openly networked" an art museum can be.

While the growth of online learning communities and Google Hangouts for museums certainly promotes this principle of connected learning, I want to begin by focusing on how museums can support openly networked experiences in the analog, physical space of their galleries.

Museums as physical, analog networks

In November 2011, I was invited to lead an in-gallery workshop for educators at the High Museum of Art as part of a conference hosted by Harvard University's Project Zero. The experience centered around an extended engagement with Jackson Pollock's "Number 1A," 1948, which was on loan from the Museum of Modern Art in New York as part of a special exhibition. Instead of an experience guided by information, we began an open, embodied exploration through a series of scaffolded exercises that included slow looking, sharing observations, quick sketching, free writing, and exploring a variety of ways to use sound and movement to create responses to the work of art. Small groups of participants were then invited to pull together sounds, movements, and words to develop a creative public performance in response to the Pollock painting. One memorable group of three teachers worked together to choreograph a short piece that used their bodies to perform their response to the complex layering of paint and brushstrokes. Freely responding to this single painting through multiple access points, as well as public performance, we were able to have a collective learning experience outside of our comfort zone and then immediately "poke at it" and see into the experience as a group. In this case (and many others like it), the art museum becomes a safe, open, and public space in which professional educators from museums, schools, and universities can come together to make learning visible and then reflect upon our practice in a shared space.

Museums as participatory spaces

While an art museum gallery can be an amazing place to meet with a class or group of teachers, museums and museum educators must work to actively support openly networked learning experiences. First of all, museums need to see teachers and students as active participants in the learning experience, pushing beyond mere "spectating" or "learning at a glance" toward a more participatory and process-oriented experience. Part of this process involves museums letting

go of their supposed authority over knowledge and meaning-making, and instead empowering educators to co-create learning experiences *with* museums—as opposed to passively receiving content *from* museums, whether that be text panels, audio guides, curators, or museum educators. Part of achieving this "letting go" is simply valuing teachers' voices and recognizing teachers as creators of content, knowledge, and meaning in relation to museums. Professional development workshops can be re-envisioned with more of an emphasis on developing communities of practice where we learn from each other no matter what our "home" educational setting might be (school classroom, university, museum, etc.). This sense of creating a community of practice then builds toward a shared, reflective process that leads to professional growth on the side of both teachers and museum educators.

Building online networks of museum educators

The openly networked, reflective practice described here does not need to be confined, though, within the walls of a single museum. My experience as a museum blogger has expanded the way I believe that people can connect around issues of museum teaching and learning. After facilitating the educator workshop at the High Museum of Art, I decided to create a multi-author online forum to publicly reflect on my own teaching practice, spotlight the practice of other educators, and provide a space for conversation around larger issues of teaching and learning in museums. Since its launch in February 2012, ArtMuseumTeaching.com has brought together more than 25 authors actively contributing to a growing online community of practice that reaches out to thousands of educators each month. In addition to standard blog-style posts and comments, the site has hosted face-to-face Google Hangouts On Air with museum educators and teachers from across the world. The site creates a networked space across museums and teaching contexts, allowing readers and contributors to see into and reflect upon the practice of a wide community of educators.

In their recent book *Networked: The New Social Operating System,* Lee Rainie and Barry Wellman (2012) have argued that large online communities actually expand opportunities for learning, problem solving, decision-making, and personal interaction:

People's relationships remain strong—but they are networked. Neighbors, and neighborhoods still exist, to be sure, but they occupy a smaller portion of people's lives. It is hard to borrow a cup of sugar from a Facebook friend 1,000 miles away, but it has become easier to socialize, get advice, and exchange emotional support at whatever distance. Where commentators had been afraid that the Internet would wither in-person ties, it is clear that they enhance and extend them.

As ArtMuseumTeaching.com continues to expand as an online space for reflecting on museum practice, I have been exploring how we—as museum and education professionals—maneuver within a technology-mediated world in a way that allows us to cultivate productive, human-centered networks and communities. Museums and schools have been engaged widely in how digital media and technology can connect them with their students and audiences, but what about the potential of these same technologies to build entirely new "communities of practice" among professionals—whether teachers, university faculty, or museum educators? I am especially interested in the ways in which an online community like ArtMuseumTeaching.com can, in turn, bring people with shared interests together in physical spaces in new and meaningful ways.

At the 2013 National Art Education Association conference in Fort Worth, the contributors to ArtMuseumTeaching.com hosted an in-person gathering during the conference. More than forty

people came together for a face-to-face social experience, an experience that is creating new professional connections and enriching existing collaborations that continue to grow through the online forum. The relationships we develop online are complex, as a simple Twitter follower or blog reader can quickly become a close colleague, friend, and mentor. A recent ArtMuseumTeaching.com Google Hangout brought together educators from Australia to New York in real time, and these connections develop new peer networks, deepen partnerships, and enrich professional exchanges that help us all grow personally and professionally.

Through this work of network building that I have been engaged with thus far—both online and in the physical spaces of museum galleries—I feel that the art museum has begun to make a shift in what it has the potential to become: a dynamic cultural landscape where authentic, learnerdriven experiences are developed and enacted by teachers and their students. These experiences are opening up museums as places for educators to chart their own path in unpredictable ways and to invite parallel exploration, risk-taking, and fresh discovery on the part of learners across a variety of contexts.

Link to Digital Is Resource: http://digitalis.nwp.org/search?search=murawski

CONCLUSION: OPENLY NETWORKING IS REACHING OUT

Each of the narratives in this chapter contain what I believe to be successful attempts to put the concept of "openly networked" into practice in a variety of educational settings both in and out of school. Gail Desler focuses on classrooms, helping them to connect to the world and to each other. Adam Mackie and Jenny St. Romain describe an experience of moving from the classroom to the community as classroom and discovering new partners along the way. Mike Murawski's focus is on both the physical space of his museum, as well as the online environments that can help him to build community and connections around museum educators' shared interests. His community seeks to build stronger physical spaces through the sharing and learning occurring in their online conversations.

I am drawn to each of these stories as they complicate the definition of "openly networked" and remind me networks—be they digital, analog, or otherwise—are powerful because they bring people together. And when we learn together, in community, we learn better, deeper, and in more lasting ways.

Embracing the connected learning principle of openly networked learning is manageable. It does require, however, that teachers and other facilitators of learning make small moves toward openness and connectivity. Making a move, like Gail, to invite teachers exploring similar topics to do so together is not difficult, but it does require an awareness of what others are doing. Gail's position as a district employee provided her this perspective. Mike chose to reach out to others online and to reconsider his museum practices. Jenny and Adam reached out to experts in the community who had expertise that could help their students. Small moves, but with powerful impact. The *Connected Learning* report includes these questions, among others, to encourage those who are considering creating openly networked learning experiences and environments:

- Are groups loosely networked?
- Are there easy ways for groups/participants to connect and coordinate action or activity?
- Are there multiple points of entry and outreach?
- Are tools that signal quality or mastery visible, sharable and easy to access? (Ito et al. 2013)

To those, I would also add a few more:

- What are the considerations of infrastructure that need to be in place or managed for sharing to occur?
- How are classrooms and learning activities designed to create permeable walls? (How can others see into and participate in the learning?)
- Who in the community beyond the classroom might be a partner in the learning? How and when are they approached for possible networking and/or partnership?

The teachers who shared their stories in this chapter thoughtfully considered these questions and used the tools, communities, relationships, and opportunities available to them—either physically or digitally—to make small moves toward openly networked practice. In doing so, they all reached beyond their present contexts to bring other contexts toward them, and in the juxtaposition they created powerful learning.

When it comes to learning, for too long, schools have felt to many students like they have forgotten that they are but one of the essential nodes in a network of learning. We reach out because we are seeking connection—to our past, to our families, to the human story, and to each other. Open networks help us find our way to ideas and people with whom we wish to connect. Teachers and institutional leaders like Gail, Mike, Adam, and Jenny are doing right by their students as they explore the opportunities that come from creating open networks of learning possibilities for their students, building community and powerful learning along they way.

CHAPTER SIX: SHARED PURPOSE

Danielle Filipiak, Teachers College

Resistance, Resilience and Relationships

You know, I learned a lot through the projects we worked together on in this class . . . Some of what I learned is that the media and schools look down on people in the ghetto . . . immigrants, people who are broke, people who do drugs. I mean, I fit a lot of these categories, but I don't have multiple personalities. Like, I chill with people who smoke weed, people who are gangbangers, and I help kids at Holy Redeemer with their prayers. I can't say either of these people aren't me. Nobody is the same way all the time, miss. People are so diverse if you get to know them. And everyone cares about something. You just gotta find out what it is, and um . . . you might need other people to help you figure that out.

Connected Learning: An Agenda for Research and Design describes learning that is "part of purposeful activity and inquiry, embedded in meaningful relationships and practices, as engaging and resilient" (Ito et al. 2013:74). Roberto, a student in one of my eleventh-grade English classes two years ago in Detroit, provides a compelling reflection above that speaks to the power of cultivating what the report names shared purpose, and I refer to his story throughout the following paragraphs to illuminate how important this concept is for non-dominant youth in particular. Far too often, these young people feel that their plights and their futures are of no concern—that they exist, in many ways, beyond love (Duncan 2002).

Given this, it seems important that we listen with intent to the purposes and interests that matter most to students, making pedagogical decisions that support these. Schooling should be a humanizing process. I contend that those who take this stance achieve much more than preparing students for unknown futures that may or may not include college, a steady job, and the like. Rather, they are equipping youth to be more critical, confident, and resourceful human beings in the present. In this way, they are addressing issues of equity that significantly impact young people in their everyday contexts, nourishing outcomes such as resistance and resilience. They build interconnected relationships, which youth can leverage to create new pathways to opportunity and healing in communities that need it the most.

Resistance

Take Roberto, for instance, who demonstrates above a sophisticated awareness of how institutions like school undermine important parts of who he is: "the media and schools look down on people in the ghetto . . . immigrants, people who are broke . . ." While Roberto personally identified with each of these categories, he resisted the fragmentation that dominant ideological formations (Fairclough 2010) inevitably imposed upon his identity. "I chill with people who smoke weed . . . [and] I help kids at Holy Redeemer with their prayers. I can't say either of these people aren't me." For Roberto, investing in a shared purpose that focused in part on civic engagement initiatives helped him cope with and speak back to an onslaught of distressing messages that vilified important components of his and his peers' identity. It helped him piece together a full self, a person in whom he could be confident. In our classroom, he could practice wearing this self with others, investigate what he cared about in his own social and cultural context, and maintain vulnerability. "[E]veryone cares about something. You just gotta find out what it is, and um . . . you might need other people to help you figure that out." It prepared him, to interact within his community as a powerful creator, thinker, and civic actor.

Resilience

Like many of his peers, Roberto tended not to commit to more traditional academic outcomes that the school district mandated. He refused to finish any administered exam, never turned in homework, and barely passed his classes. However, he was not a disengaged student.

Roberto demonstrated a notable amount of resilience when he was presented with tasks he deemed meaningful. For example, he worked diligently on collaborations centered on media production and especially enjoyed history. Whenever we engaged in dialogue or debate aloud, he would offer a historical perspective or provide rich metaphorical examples that appealed to students' local understandings and knowledge base. When I assigned his group to capture shots of the neighborhood surrounding our school, he walked into the Mexican bakery on the corner and interviewed a group of elderly women about their opinions of the festive artwork hanging on the walls, later spending hours editing the footage into a short documentary. When adult community members visited the classroom during the second semester to help with student research projects, it was not unusual for him to initiate casual conversation about a topic that interested him or engage in a bit of verbal sparring to showcase his linguistic prowess. Provided with the right supports, Roberto could translate this knowledge into pathways of opportunity.

Relationships

One of the most important supports he could receive was guidance and mentoring from his peers and caring adults. Perhaps more than anything else, the experience of exploring and shaping a critical shared purpose with others served as an impetus for participation, providing unprecedented opportunities for Roberto to engage in critical self-reflection and agency. As I saw it then, rather than approaching him as an academically deficient young person, it seemed more appropriate to create an environment that mobilized his assets alongside his surrounding community's (Moll 1992), creating inroads for cross-generational, cross-cultural relationships to flourish around the interests and goals deriving from such. From here, we could determine together the best ways to connect interests and social engagements with academic studies and decide what activities would be useful and relevant in our own contexts. Yes, this was messy work. Immediate quantitative outcomes were difficult to measure, if not impossible. It was necessary labor if we were to align ourselves with the need to "address the overall health of communities and learning writ large, centering our values on equity, full participation, and collective contribution" (Ito et al. 2013:34).

Roberto's engagements help us imagine what some of these outcomes might look like, but there also are other insightful and deeply committed educators who are thinking about shared purpose in unique and valuable ways, both in formal and informal educational contexts. In this section, we hear from three of them: Jennifer Woollven shares a very honest account that bears witness to the victories and struggles she encountered while trying to figure out what exactly shared purpose is and should do. Robert Rivera-Amezola discusses how his work with fourth-grade ELL students on a service-learning project created new opportunities for students to take on leadership roles and improve language skills. Finally, Bryce Anderson-Small articulates the transformation that Detroit youth underwent as they participated in both media deconstruction and media production activities through his organization, HERU.

In each of these narratives, we are given snapshots of youth who thrive when surrounded by people who support them in pursuing their own interests and passions, which may be very different from what districts, states, or teachers impose. Outcomes like resistance, resilience, and interconnected relationships may not be found in standards documents, but they matter for the life trajectories of youth like Roberto. Shared purpose, then, is perhaps one of the most urgent aspects of the connected learning framework, in that the relationships that drive it are essential for motivation and, in turn, feeling and experiencing love in the classroom.

SHARED PURPOSE LEADS TO CIVIC ACTION

Jennifer Woollven, Central Texas Writing Project

The last year has been a journey of making sense and meaning of what exactly connected learning is and what it means to me. Along the way, I've had the privilege of joining conversations with amazing National Writing Project teachers about what shared purpose looks like and how it takes shape. I'm constantly comparing this framework to the things that I do as a teacher, wondering which principles already live in my classroom and how I might breathe life into others. What I've realized is that shared purpose is more than just collaboration among students; it can be something that emerges quite organically as students pursue their passions and engage with their communities.

I've taught in a variety of settings: ESL in South Korea and Eastern Europe, as well as social studies and English language arts in middle and high schools, urban Title I schools, and most recently at an affluent suburban high school. My experiences confirm for me that connected learning holds water. It is, in fact, a "no duh" approach. That's not to say it's easy. It's not. But I do believe that it is absolutely necessary if we want to create meaningful learning experiences for our students that help them become engaged, passionate, and critical citizens.

I'm a little embarrassed to say that it took me longer than it should have to come to this conclusion. I can remember early, bitter days in a boring classroom in which I unsuccessfully tried to fill my students' heads with enough minutiae that they might pass the required standardized tests. Sure, I used my "teacher toolbox" of interesting activities and strategies to liven things up, but that was *my* toolbox, and it was nothing more than a superficial and very lame facade dressing up content that held no interest or connection for my students. I was clueless and frustrated. Looking back now, I realize that my classroom was driven by fear and an attempt to control. I was afraid of the test and its devastating repercussions for both my students and myself, and as a result, I was trying to tightly control the outcome. I needed to drop the reins and step out of the way. This realization didn't happen overnight, but fear and stress are exhausting. I was tired. And my fear and guilt began to transform into rebellion. At first, I blamed the system, but eventually I realized I had to start with myself. How could I become a better, more responsive teacher to my students and help guide rather than control their learning experiences?

My journey to becoming the teacher I wanted to be included receiving mentoring from wiser, happier teachers who understood how to spark student interest, attending a master's program at Texas State University, and participating in the Central Texas Writing Project's Summer Institute. By the time I joined a team of teachers at a New Tech high school who were committed to designing engaging, project-based-learning (PBL) curriculum, I began moving my classroom to a place that honored students' passions and interests and encouraged them to create products that they considered meaningful.

Becoming a New Tech teacher meant that I was able to continue experimenting with productioncentered, interest-driven curriculum, but I now also had access to resources and mentors who were helping me learn how to best facilitate student collaboration and presentation skills. Using PBL consistently in every class had a profound impact. Students developed an independence of thought and action that I had not seen before. They advocated for themselves; they asked provocative questions; and they supported and challenged one another. When I was first introduced to connected learning, I had been living and breathing PBL for four years, and to me, these two frameworks seem completely in harmony. The PBL model is centered on producing, and students typically have a good deal of freedom in deciding how they want to approach a challenge that is anchored by content-area curriculum. They collaborate in teams, and they must rely on various networks to accomplish goals.

At first glance, shared purpose seemed implicit in the collaboration of a team project, but I will admit that sometimes shared purpose is superficial. A student is not always going to be personally motivated or passionate about a particular project or challenge; sometimes that shared purpose is more about a grade or not letting your team down. But other times, shared purpose comes to life. It takes root and grows. Here is how I witnessed that happen at a high school in Austin, Texas.

Eastside Memorial is the typical struggling, urban school—punished because of scores, shut down, repurposed, and renamed. It is no surprise that its students were uninterested and disengaged. Why care or invest in a system that ultimately values you as a piece of data? And more specifically, a piece of data that is a huge liability in the system of standardized testing. A system that cares nothing for inquiry, lifelong learning habits, or creative thinking. Because of this mindset of fear, many Eastside students were forced into remedial math and reading classes, leaving no space for courses that interested them. Essentially, all they were learning was that school was boring and completely disconnected from the reality of their lives.

It took an entire year to acclimate our students to a new environment of PBL, an environment where they had choice and voice, an environment where they had to problem-solve and be creative, an environment where they had to work together. It was tough. We were asking them to think, create, and make decisions. Transitioning to this kind of engagement is not easy when you've managed to get by filling in worksheets and having a teacher tell you exactly how something should be done. Now, we were asking students to come up with the questions to guide their design plans, and they were frustrated because this was not easy. By the end of year one, they had gotten the hang of it, but by year two, they owned this process.

During my three years at Eastside, I looped up each year so that I had the rewarding experience of teaching the same group of students from their freshman to their junior year. Sophomore year, we embarked on a project in which teams of students looked at local media coverage of our school. It wasn't pretty. Our local newspaper had printed several articles and editorials that painted a bleak picture of Eastside, its students, and its teachers. Our purpose was to improve the reputation of our school. Teams went through a process of categorizing all of the great things that were happening at the school (robotics club, sports, internships, etc.), selected a specific news outlet, and set out to ask if it would write something positive about Eastside. As students researched what had been said about our school in the media, they posted what they found on a blog about our class, Ning. Students used Google Docs to compile lists early on in the process and then to collaborate on the composition of team letters. Throughout this process, I used Google Forms to send surveys out to students, which allowed me to check in on their progress and address any problems that teams might have.

Many of my students were upset about the editorials written by a specific columnist, Alberta Phillips. One of those students decided he would call her and invite her to Eastside. He did this during class, and I was able to listen in on his side of the thirty-minute conversation. Wow. This student spoke professionally and politely yet remained firm in his assertions of the positive things happening at Eastside. He understood that he was representing his peers, his school, and his community. The end result was a visit to the school and our class and a very positive editorial piece but, more importantly, the winning over of an ally. Ms. Phillips continued to watch the tumultuous story of Eastside and wrote as an advocate of the students she had come to respect and admire.

The students who participated in this project would go on the following year to write letters, protest, and speak in front of the school board when Eastside was in danger of being turned into a charter school. They were part of a galvanizing community movement that eventually spread the

word and used electoral power to dramatically change the face of the school board and reverse the decision that would have dismantled the Eastside vertical team of schools—a decision that had been quickly bulldozed by the superintendent despite community outrage. The ultimate goal, the purpose, shared by Eastside students and the Eastside community was very real and the stakes were very high.

The Eastside story demonstrates the power of students working toward a common goal and making a positive change-making a differencein their community. They had a shared purpose, and they had encouraging teachers and mentors, but most importantly, they discovered the power of using their voices to tell their story and ultimately impact the story of their community. In the end, I learned as a teacher to respect this voice, their purposes, and step back enough to allow their interests to unfold. Shared purpose is a journey.



Eastside Memorial students protest against charter school proposal



Eastside Memorial students and community members show pride while letting Austin Independent School District Board know they don't want their school taken over by IDEA Charter Schools

Link to Digital Is Resource: http://digitalis.nwp.org/resource/5426

A FOURTH-GRADE SERVICE-LEARNING PROJECT

Robert Rivera-Amezola, University of Pennsylvania

After several years of teaching fourth grade, I was ready to explore new learning opportunities with my students—ones infused with meaning, curiosity, and joy. To help me do this, I teamed up with Need in Deed, a local non-profit that aims to provide students a framework with which to become more civic-minded and productive citizens while gaining a practical application for the academic content of school. My work with this organization helped guide my instruction for the remainder of the year and opened up new angles for me to analyze my classroom practice. Perhaps because Need in Deed was not part of the formalized curriculum of the school, I began to see content through a new lens.

For the next nine months, our class took a systematic look at social issues that were the most important to them. In the end, water conservation and pollution were the issues the class most wanted to focus on for the school year. It was a collective decision—from the bottom up, not top (teacher) down—so investment was high from the beginning. My role in this process was to integrate math, science, social studies, and English language arts with the social issue the class picked and to help carve out a service-oriented project in the end.

My role as a facilitator of learning rather than a dispenser of knowledge structured the nature of the task so that students took ownership from the very beginning. As a facilitator, I pulled together community resources that would help my students form a connection between what we were learning in class and what was happening outside of the classroom. The Fairmount Waterworks Interpretive Center was a crucial resource. Representatives from the center came to our classroom to work with the students, and we were given the opportunity to visit them for a hands-on opportunity to understand the particular water environment of the Philadelphia region. Technology also helped my facilitation of the learning. Whether it was a classroom blog or a webquest, my job was to teach my fourth graders these modalities and then allow them to use the resources as they saw fit.

The school my fourth graders attended was located in a particularly dense area of the city of Philadelphia. Brick row homes and concrete sidewalks surrounded the 100-year-old school building. Few trees or open grassy spaces were available in the area, and although the city itself is situated between two important rivers (the Schuylkill and Delaware), it was highly unlikely that the students would have considered the rivers' crucial role in their lives. Indeed, some may have had few occasions to visit or even partake in many of the rivers' recreational opportunities. As perhaps with many children, water was simply something that came out of the faucet and was never thought of again.

Another important aspect of the classroom was the role of language. The majority of our class was composed of English Language Learners, with Spanish being the dominant language of expression. However, all instruction was given in English. Making the content accessible to *all* students was a major consideration of mine, but the shared experiences that both technology and outside community resources afforded helped make the content less intimidating. For instance, much of the research and discovery came from navigating online resources like e-books from the local library. Some e-books were in multiple languages, and those that were written solely in English required shared understanding with more proficient English speakers.

The core connected learning property of "shared purpose" was a natural fit for this project. One of the critical components of our service-learning project that year was the decision that all ideas were student-generated. Remaining true to the goals of Need in Deed, giving voice to the interests of the students was paramount. Throughout the entire process, the students were active participants in their learning, and all were working toward a mutual end-goal. As mentioned earlier, I saw my role as a facilitator rather than an instructor, which was a fundamental principle of the Need in Deed framework and one that resonated well with my overall philosophy of teaching and learning. It also felt right since all of us were new to service learning. Therefore, as the needs became evident, I found myself utilizing the most efficient and democratic online resources to allow my students' voices to be heard. For instance, in addition to classroom discussions in large or small groups, for the first time I utilized a class blog to keep the discussions going. The blog enabled my students to post and debate ideas about various forms of pollution. My English Language Learners used digital images to help them make their points and to make connections with what was being discussed in class. When it was time to narrow down our topic for a service-learning project, the class utilized an online poll to cast their final votes. Obvious measures needed to be taken to safeguard the protection of my fourth graders while navigating social media and web-based communities. Parental permissions were collected, and sometimes communities were closed to those outside of the educational sphere. Nevertheless, our learning and project goals still were able to proceed.

In a classroom composed of large numbers of English Language Learners, equity is always a concern. Regardless of children's language acquisition level, their perception of fairness is no less acute. Fair, however, may not necessarily mean equal. How one child accesses information or participates in class may not look the same as for another child. To illustrate, Ydely entered our classroom from the Dominican Republic late in the year, but she was determined to be part of the project despite her very obvious limitations with spoken English. Her heavy accent is easily recognizable in the podcasts, yet her leadership skills and tenacity were undeterred. Though I was concerned that the communication of our ideas would not be as easily decipherable as with a native English speaker's voice, I was not going to dissuade her spirit. Meanwhile, there were other students in our class with a much better command of English but who chose to take a less verbal role in the podcasting. The service-learning project offered a variety of entry points for all the children in the room to take part. Some students used their voice to communicate, such as during the podcasting phase of the learning. Others preferred to draw or write their ideas, such as during the brochure creation and information dissemination phase. Still others worked and learned

best by physically doing the work, such as during the demonstration and presentation of the science behind water pollution and contamination. No matter what the phase, the principle of equity ensured that all children, including Ydely, had a fair chance to learn and demonstrate what they knew based on their individual talents and interests. She was assured a place in the learning arc just like the rest of the members of the class, even though it may have looked and sounded different.

Students using software like iMovie or Garageband to piece together their collaborative projects



Perhaps the hallmark of a connected learning experience is the belief that learning happens best when peer networks are harnessed and meaningfully utilized to advance student interest and accomplishments. Initially, this process was a challenge for me. I was accustomed to running a classroom on a tight schedule with controlled student interaction. As my comfort and level of experience increased each year, so did the freedoms that were expressed in the classroom by my students. I remember specifically one moment during the year of our service-learning project when Jessica, a student, decided she wanted to interview each member of the class after one of our trips to the Fairmount Water Works. She took one of our class digital recorders and began circulating around the room, asking classmates about their impressions of the field trip and what they learned most from the experience. I also remember episodes of unease surface within me as I allowed this unscripted moment to continue. What resulted was a wonderful little collection of digitally recorded vignettes by members of the class, which we later used in one of our podcast creations. Jessica followed her own interest by making these interviews. She undoubtedly constructed new knowledge for herself and perhaps for those she was interviewing when she walked around with the digital recorder recording their reflections. Then, during the podcasting creation, she weaved everything together in a new digital format.

More than any other activity that year, the service-learning project involved *everyone*. While some students, like Ydely and Jessica, naturally took on more demonstrative roles during the project, others found space during the project that felt right to them. Michael was perfectly content contributing a mountain of shoeboxes for the creation of a model city block that would help recreate water use within a typical city block. "We have lots of shoes at our house," he said, "so that will be my job."

In fact, because the service-learning project had many points of entry for the students depending on their interests, the ELLs in the room interacted with English organically. The language learning that ensued had a more natural feel to it than if students were working independently out of a common basal reader. A specific example was the research and exploration of each area of pollution (land, air, and water) that was necessary before settling on one class focus. Webquests served as the primary resource for information. Groups used the webquests to acquire information, and ELLs



were able to contribute to the information gathering based on their language comfort. Carlos, an ELL in the land pollution group who was just at a beginning level in English language proficiency, clearly understood his group when he was tasked with locating images of items to fit in each of three categories: reduce, recycle, and reuse.

Ellen Schultz, of Fairmount Water Works Interpretive Center, teaching class with hands-on experiences During the course of the project, teachers often felt daunted by the work that seemed to be involved. As I reflect on that year, there are three ideas that come to mind that helped make the work achievable. First, our work together had a very clear *purpose*. The Need in Deed framework no doubt helped to clarify our purpose. Once our goals were clear, I was familiar enough with various digital tools, as well as the mandated curriculum, to help make all the pieces fit. I don't think I could have accomplished as much if I were new to the profession or even if I was teaching a new grade. In my view, to make a new endeavor work in the classroom requires an incremental and purposeful approach. Second, keep an open mind. There were inevitable, unforeseen bumps along the way, which should be expected, but every moment counted as a learning experience. When one of our community partners came to our classroom for a scheduled visit to photograph the student work, our class was not nearly ready, and I was mortified. Nevertheless, I had to remind myself to take a step back and allow the process to unfold on its own. Third, take a *risk* now and then. As described above, when Jessica began recording her classmates during an ad hoc moment, I was outside of my scripted comfort zone. My head said, "This is not in the lesson plan." My heart said, "Let her run with it." What resulted was a meaningful experience not just for Jessica, but also for the project as a whole.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/366

HIP-HOP LITERACY X ENTERTAINMENT JUSTICE = YOUNG DIGITAL ECONOMIES

Bryce Anderson-Small, The HERU Organization

On a macro-level, there exists a global corporate mass media and communications industrial complex that has proven throughout to propagate problematic narratives and messages regarding the diaspora of ancient African descendants throughout the world. Over all major channels of massmedia distribution infrastructure, negative racial stereotypes abound, and pictures of destructive and debased criminal-consumer behaviors are attached to a primarily black and brown urban demographic. An unfortunate response by the public is a call for increased criminal justice measures, which has created dehumanizing conditions for young people in particular, the worst of which manifests as racial brutality and the exodus of "black and brown young men" from their communities to the private-prison industry.

When we look at the major implications of these exploitative corporate narratives on a micro-, localized level, we see a clear connection between the manifestation of self-destructive behaviors within our communities and one of their root causes: the constant exposure to subhuman, criminal, misogynistic, and genocidal points of self-identification via corporate mass media and corporate entertainment. Urban young people are consuming images of themselves on major radio and TV programs, and increasingly on the Internet, that show women and men who look like them celebrating behaviors that correlate to sex/prostitution, drug use, and professional killer self-identities. This phenomenon presents to us a clear problem, as well as an even clearer solution: empower young people to counter these corporate-sponsored messages through creating their own justice-based entertainment media.

In present-day Detroit, a city whose rich cultural legacy of creative innovation is responsible for revolutionizing industry and entertainment in the twentieth century, we are brimming with brilliant young creators who are growing up in an era where hip-hop is the dominant cultural expression in pop-culture entertainment. Because of hip-hop culture's heavy influence on the aesthetic of pop music and cultural media, our young people have the opportunity to identify with images of their own culture's expressions via mainstream media channels. Equally impactful is that hip-hop as a recent pop culture phenomenon is affording our young people the opportunity to consistently see images of themselves as artistic, intellectually expressive beings who use art and media to communicate their emotional, physical, and spiritual realities.

In our city, there are numerous youth environmental and social justice organizations that harness the potential of media and digital tools for self-empowerment and community transformation. This movement speaks to the desire of our young people to engage in transformative practices using media arts, as well as the population of dedicated adults who serve them in uplifting their personal and collective voices. For my organization, the HERU, we work to create impactful and sustainable intergenerational collaborations (e.g., Detroit Future Youth Network) that serve to provide growing numbers of young people access to digital media creation tools and professional skills development. Our intent in this work is to: support the growth of new digital economies that connect individuals across various cultural, social, and/or ethnic lines; foster a cultural environment in Detroit that is abundant in media that promote positive points of self-identification and constructive community behaviors; and create entrepreneurial opportunities for those skilled in uplifting and producing this twenty-first-century media.

Teaching context

We work with young people in Detroit between the ages of 7 and 22 to co-create entertainment media that project positive points of self-identification and constructive community behaviors. We work with our young people to actualize their personal and professional performance/media arts aspirations through intergenerational professional development and digital media tools training. We assist young people in clearly defining their positive points of self-identification and personal values, as well as co-develop methods for successfully projecting these identities and values in their lives and media.

Through media literacy, we serve to inspire our young people to ask critical questions, as well as work with them to develop cognitive processes that will allow deeper levels of reflection, introspection, and insight into their own behaviors, identities, and community issues. Together, we use the digital media projects our young people initiate as opportunities to help them unpack their socially-derived points of self-identity—corporate-mass media programmed consumer values/conditioned behaviors—and make connections with how these factors influence the way we imagine ourselves.

Participation, equity, and social connection

The following are illustrations of how the HERU co-program directors engage our young people with shared purpose and what the expressed behaviors coming out of these interactions look like. In a natural way, we employ the principles of participation, equity, and social connection. My sharing reflects a unique mentor and facilitator perspective, and I will draw attention to the connections between my personal/professional ideologies (and points of identity) and how these connect to our shared 5eHERUBiz lens, which ultimately influences the ways we co-create safe and authentic engagements for connected learning and self-empowerment with our young people.



Introduction to 5eHERUBiz Young Mentors Anina H. (aka DJ LaNINA) and Shae K (aka King Kold)

June 2011 marked the beginning of the HERU Organization's partnership with the 5e Gallery to form the 5eHERUBiz program, as well as the formation of our Detroit Future Youth Network. Anina and Shae came to our new "media literacy for youth leadership and entrepreneurship" program—Anina with an interest in learning fashion photography and DJ'ing and Shae with

interests in hip-hop songwriting and record production. Co-program director Piper Carter, a high-fashion photographer, facilitated Anina's digital photography skills workshops, and they began with deconstructing images of women in fashion/mainstream media. At the same time, co-program director and world-renowned DJ Sicari Ware and I led the beat-making and record production conversations with youth and also began with intentional media analysis and deconstruction of corporate urban and Top 40 entertainment media. This activity became the foundation that we lay in our beginning interactions.

Over the next sixteen months, Anina's leadership was nurtured by her choice to accept the development opportunities that she asked us to arrange for her, as well as through declining opportunities she valued less, which was a negotiation process. Some of the activities she invested in were creating 5eHERUBiz playlists, which involved what we call "digging for" (i.e., researching) music absent of misogyny, drugs, and violence. She also self-selected to musically facilitate (lead) positive youth social events, which we called "loving community spaces." Anina felt comfortable and free to say "no" to any opportunity presented, and to us this is a clear example of a young person lovingly owning her point(s)-of-value, or lack thereof. For me, this is an expression of practicing equity, fostering conversations with Anina that make her feel strong and clear in her freedom to invest her time and energy in whatever opportunity she chooses. Since this is in fact *her* path as a young person, we program directors are simply sharing tools and helping co-navigate where Anina wants to go. Anina's positive self-identity was nurtured in her digital photography workshops—through her being guided to define her own cultural points of beauty and then learning to uplift those aspects through accepting apprenticeship opportunities with Piper to shoot fashion or major Detroit cultural events.

Shae's identities as an emcee, youth leader, and entrepreneur also were nurtured through a similar process. Through *his* self-selection to perform at youth open-mics hosted by the 5E Gallery, he was able to practice and demonstrate behaviors that advanced the recording and co-producing of his own hip-hop songs with AEeTech and subsequently booking himself at local cultural events. Later on in June of 2013, two years after their first encounter with our program, Anina and Shae both self-selected and co-led their first 5eHERUBiz "How to Develop Group Principles" workshop at the fifteenth-annual Allied Media Conference. Anina also was appointed to become a member of the *Detroit Youth Food Justice Task Force* and, most recently, represented them and 5eHERUBiz as a youth facilitator during the Jimmy & Grace Lee Boggs Center's "Detroit2013" conference (June 23–30, 2013).

The point of this illustration is to highlight both our value and identification with fostering authentic conversations that start at a point of shared personal selfinterest and then growing with young people toward deeper social connection with their own local communities. We hope that in addressing local issues that we share with other communities on a national and global scale, young people will want to participate and lead these evolutionary conversations into the future.

"Kold as BRYCE" Media Literacy and Self-Identity through Hip-Hop Songwriting/Record Production Three-Month Project (Single-Youth Project)



In May 2012, then 19-year-old aspiring emcee and 5eHERU biz program participant King Kold approached me informally at a non-program social event with an aspiration to do a full-length recording project. He was speaking with great emotional excitement about the new opportunities this project would create for paid live performances, music sales, and most importantly recognition among his peers as a mature, non-youth hip-hop artist. Our shared purpose was the continued development of young people in leadership and economic empowerment capacities. For King, this project was intended to establish his identity as an "adult" to everyone in his community within earshot. In what way he would go about establishing this new adult identity—through lyrics, his behavior, and actions—he was less clear. Again, I emphasize that King approached me "informally" to uplift my ideal of maintaining the awareness, as facilitators [co-producers], to use each media-based conversation our young people initiate as an opportunity to engage them in a professional-skills-developing and positive-self-identity-affirming context. In this case, King's *initiative* looks like him proactively starting the conversation, thus qualifying as *self-led*. To move his conversation forward and begin an opportunity for self-led development and ownership, my response to King was "schedule a formal meeting with AEeTech Edutainment [my record producer identity] to have 'this' conversation because this type of conversation is a 'record production x artist conversation,' not a 'Bryce x Shae kick-it' convo. To do this for real, you have to approach the producer formally and set up a meeting to investigate the potential of *your* project." This moment, for King, signifies his first opportunity to choose to *participate* in his own professional development and project creation. This opportunity also reaffirms for King his true ownership (equity) in this project, for it will not move forward without him behaving in specific ways. This moment for me signifies my first acts of *commitment to participate* in King's development, thus establishing the foundation of our shared purpose.

Concluding reflections

My media literacy work is *self-identity work*, which means that our young people must first be guided in realizing the existing points of positive value they already have for themselves. The only way we, as teachers, can truly serve our young people in making these key connections is by starting these conversations with them, with full orientation and intention on learning their personal agenda and uplifting their positive points-of-value along the way.

At the same time, we must vigilantly unpack our own self-interests and points-of-identity, allowing us to be present in our own aesthetics and perspectives and to wield these tools to help the young people build their ideal developed-self. The reverse of this is teachers unknowingly projecting their own self-identity onto their young people, whereby unreasonable and false expectations begin to formulate. These expectations manifest as teachers negatively judging young people for not meeting their own adult standards of progress. The error is measuring young people based on any measure of value other than their own. The young people's experiences must be the barometer by which we measure their development, not the teacher's life history or measures of success. This point will help us deal with the perceived "checking-out" or loss of interest that we may observe in our young people from time to time.

"Self is the beginning of community"; the classroom is your local community. In community-building, social-justice work, we start with identifying the unique skills and genii of the individual members and then co-create systems and solutions that leverage each member's unique identities toward advancing the interconnected goals.

Link to Digital Is Resource: http://digitalis.nwp.org/resource/5147

CONCLUSION: LISTENING AND SHARING

The contributors in this chapter share potent examples of projects where youth co-designed and implemented initiatives rooted in a shared purpose. These students drew upon engagements with social-media or web-based communities to expand both their audience and knowledge base. In each case, young people were positioned as producers of content, grew important skill sets that could transfer into both real life and school contexts, and took on projects that fostered civic engagement. These examples reveal the new ways that young people are using digital media to communicate, negotiate meanings, and generate purposeful encounters with content in increasingly collaborative ways, expanding the potential of social learning.

The concept of shared purpose in these learning environments is important because it can be a tool that can leverage equitable experiences for vulnerable groups of young people. Identified shared purposes become the mechanisms by which contemporary problems of educational equity are addressed. Consequently, the role of teacher-educators in providing supportive relationships and building learning environments that foster this shared purpose is perhaps more important now than ever before and cannot be overlooked.

So what can we learn from the authors in this section toward this end? As Jen Woollven admits in her piece, schools can be difficult places to institute change these days. She confesses:

Looking back now, I realize that my classroom was driven by fear and an attempt to control. I was afraid of the test and its devastating repercussions for both my students and myself, and as a result, I was trying to tightly control the outcome. I needed to drop the reins and step out of the way. This realization didn't happen overnight, but fear and stress are exhausting. I was tired. And my fear and guilt began to transform into rebellion.

For Jennifer and Robert, something had to change. Both inherently knew that what schools were asking them to do was not best for the students who were in front of them, and so each made important adjustments that pushed them to move from delivering content to facilitating loving and supportive relationships around student interests. Robert shares:

Perhaps the hallmark of a connected learning experience is the belief that learning happens best when peer networks are harnessed and meaningfully utilized to advance student interest and accomplishments. Initially, this process was a challenge for me. I was accustomed to running a classroom on a tight schedule with controlled student interaction. As my comfort and level of experience increased each year, so did the freedoms that were expressed in the classroom by my students.

Teacher positioning matters. When teachers change the way they position themselves in relation to students and content, they give students permission to exercise creativity, take more risks, and live and grow inside of their own skin a bit more. It fosters, in many ways, a kind of self-love that can only come from a person figuring out and then investing in what is important to them.

Being human is relational (Lave 1996). It is no surprise that both of the classroom teachers above highlight that the adjustments they needed to make, perhaps in some de-humanizing environ-

ments, were at a relational level. Sometimes, however, the capacity to build relationships almost seems like magic, an invisible superpower that some educators have and others don't. Additionally, activities that leverage the benefits of building relationships inside of school-project-based learning, group work, and the like—are oftentimes treated as "fluff" and aren't considered serious academic activities. That said, educators who have had success with students know that both of these statements couldn't be farther from the truth. They know that growing a shared purpose that is anchored in meaningful relationships means making very strategic moves (not magic) inside of learning spaces and that doing so can result in valuable returns, even if these returns look very different across contexts. For instance, Bryce Anderson-Small outlines with precision the ways he draws out and then supports young people on various media production initiatives with his organization, HERU. When young people took on media projects after first going through a series of media deconstruction workshops and having crucial conversations with adults, it was understood that their products would "project positive points of self-identification and constructive community behaviors." Media making, in the context of Bryce's organization, was significantly influenced by the values that adults and youth leaders revisited through ongoing discussion, with the aim or shared purpose of creating what Bryce calls "healthy, sustainable, digital economies." Young people were engaged with this in mind, and so their interactions with media tools and each other were not coincidental. Nothing was approached without intention, so while the projects that young people created were not uniform, the shared purpose remained consistent. This, I believe, is important to note.

Jennifer Woollven problematizes the idea that young people will automatically buy in to shared purpose, suggesting that it is no magic bullet:

At first glance, shared purpose seemed implicit in the collaboration of a team project, but I will admit that sometimes shared purpose is superficial. A student is not always going to be personally motivated or passionate about a particular project or challenge; sometimes that shared purpose is more about a grade or not letting your team down. But other times, shared purpose comes to life.

The natural question following this statement might be, when *does* shared purpose "come to life"? Or should we ask, how do we, as educators, create conditions for a shared purpose to authentically take root? Each of the authors suggests that developing a shared purpose is an iterative process, one that organically surfaces as students become aware of what they care about. It seems that what is most important is listening to students and taking what they have to say and care about seriously—and doing the honest and necessary work of examining whether or not the purposes and interests they offer up match those that we offer support for in the classroom.

CONCLUSION

Antero Garcia, Colorado State University

Changing the Narrative about Teachers and Learning

Turn on the news or open a newspaper (either by unfolding the printed page or directing a browsing window to your preferred website), and the dominant stories about teachers and schools will be familiar: dropout factories, crotchety unions, lazy teachers, disengaged kids, no supermen in sight. Amidst occasional feel-good narratives of teachers overcoming all and transforming the lives of their students, the messages we read about are frightening and worrisome. The helicopter view of what's happening in schools, however, eschews the possibilities and passion I see in students and teachers today. While policy and news media focus on narratives of failure, they are missing the sleeping giant of teachers and students not-so-quietly building networks for large-scale, grassroots reform.

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In editing and reading the contributions of the many educators over the previous six chapters, I am imbued with pragmatic optimism. Do we, as a field driven to improve the learning opportunities of youth in today's schools, have a lot of work to do? You bet. However, reading about Katie McKay's fourth graders creating their own films in Chapter Three or about the collective civic action at Jennifer Woollven's urban high school in Chapter Six, I am confident that we are in a transitional space in which we can re-orient the stories we tell about teachers in classrooms today. Some of this shifting of narrative is already happening in the formidable online spaces that mirror youth-led connected learning principles. Google Plus communities, frequent and myriad online blogging from educators, and the National Writing Project's Digital Is page, which acted as the initial impetus for contributions for this book, all signal connected learning and illuminate for readers actual teacher practices today. At the same time, I think teachers, researchers, and teachereducating universities can do more.

The stories of teachers transforming classrooms and supporting student-interest and academically rigorous learning are there. As a collective field of digital researchers, we need to amplify them. Liking, retweeting, and forwarding to friends is part of it, but we need to be deliberate in how we continue to address the formation and development of the twenty-first-century teaching profession.

Tending a Profession

Listen closely and you will hear how the Germanic roots of the word *kindergarten* loosely translate as "*children's garden*." The highly structured and also inquiry-driven forms of childhood learning displayed by educational pioneer Frederich Froebel more than 200 years ago can be seen in the "progressive" educational mandates of John Dewey in the early 1900s and in the technologically supportive work of Seymour Papert in the 1970s and '80s. As we've turned the corner on a new century, we need to highlight now a garden that has grown in complex ways.

Further, just as with the children, we need to be cautious of how we are tending to the support of pre-service teachers. A theory of educational change I believe in is focusing on our future teachers. As mandates, standards, and assessments suggest singular pathways of how to instruct in classrooms, the principles of connected learning can be used to push back on these instructional approaches and open up a vision of the learning ecosystem in which educators prune and polish.

Taking Time for Making Change

The kinds of connected learning examples shared throughout this book are the results of support, reflection, and—often—risk taking. Making these learning opportunities even more widely available for students in the U.S. is going to take time. Teachers need to be able to process and reflect. Building dynamic learning ecosystems from the connected learning design principles requires an investment in profession-wide patience.

The many demands we make of classroom teachers each day—for example, administrative minutiae, general classroom maintenance, and nightly grading rigmarole—are significant. Many of these demands do not even directly improve the relationship between student and teacher or the outcomes of kids in schools. How can we better streamline what teachers are being asked to do and ensure the relevancy of their work in supporting individualized learning for all students? Questions like this challenge how we are continuing to operate schools in the twenty-first century and prepare teachers for the students of today.

Making the time for connected learning also means making it feel less intimidating for both new and veteran teachers. There is an assumption that we're talking about new things when we talk about connected learning.

Doing It Wrong¹

There was a long period of time when I didn't "get" Twitter. I would struggle with the medium and could tweet a sentence or two, but it didn't feel very practical. Hearing from friends how important of a tool it was, I assumed I was "doing it wrong," which tended to be how I felt about new tools as they rolled along. As an example, let me turn to Facebook briefly. The migration of my high-school students from MySpace to Facebook was rampant and swift. Within a year, MySpace was bereft of its biggest demographic of youth as Facebook accounts become the ubiquitous cache of legitimate online student identity (the initial social and racial disparities between MySpace and Facebook are explored clearly by danah boyd 2009).

As I watched a new demographic utilize a social network that was initially populated by people around my own age, I was intrigued by the differences in use. I would often see a student post a status update that would be followed by dozens of comments. Looking at these, students were utilizing the commenting space on Facebook to engage in chat-like conversation. Often only one or two participants would rapidly fire comments back and forth to have publicized chat logs (some extremely personal in nature). I remember distinctly thinking "those students are doing it wrong." For me, such conversation should be conducted in a chat window, through a private message, or—ideally—in "real" life. I didn't understand that I was naturally ascribing my own rules of use on a cultural practice that was not my own.

It was only relatively recently that I better understood that the idea of a "correct" use of a tool is often dictated by the practices and cultural contexts of the people I follow and trust. This "affinity space" (Gee 2004) includes the peers with whom I share similar ideological perspectives and excludes a *lot* of people who are different from me. As such "doing it wrong" is culturally constructed and important to remember when we think about how we will roll out sustained connected learning support for teachers nationally and globally.

¹ Portions of this section originated in significantly altered form as a post on my personal blog: http://www.theamericancrawl.com/?p=816.

In the introduction to this project, I mentioned that the examples contained here are much more than best practices. The nation's current metric-based-assessment focus means that books high-lighting the "why" of connected learning without step-by-step implementation directions are "doing it wrong." For me, it is important to recognize that all of the teachers in this book worked toward ways of finding their own pathways for implementation. They co-construct with their students, even when the current educational era decries this work as also "doing it wrong."

Likewise, I want to highlight that the digital "stuff" shared in this book should not be the focus for readers. In discussing the goals of classroom connected learning with the five other chapter authors of this book, we began to drill down to the tension between technophilia and non-digital connected learning. At one point, Bud Hunt, the author of Chapter Five, said, "The Internet didn't create connected learning." His is an important notion and one that is reiterated in *Connected Learning: An Agenda for Research and Design*. However, policies and current trends toward 1:1 laptop and tablet programs highlight primarily the value of the digital "stuff." It's convenient for news readers and bond-voters to see tangible changes such as students holding expensive devices compared to paying for teachers to . . . learn more.

While the technology is easier to see, the principles that inform its use are more important. The teachers in this book demonstrate this difference, and districts and teacher-education programs would heed well this demonstration. Often in policies and district decisions that lead to millions of dollars being invested in technology, a limited understanding of "how" connected learning can unfold gets depicted. However, the "why" is most important and developing an understanding of "why" requires time, dialogue, and support of the teaching force. As a society, we get stuck on the digital; we're "doing it wrong." The contributors in this book remind us that it is the principles that point to engaging learning opportunities and educational revolution.

AFTERWORD

Christina Cantrill, National Writing Project

The stories and examples of classroom practice in this book were originally shared on *Digital Is*, a National Writing Project web site. That site and this book start from the argument that, in an increasingly interconnected and networked world, *digital* is how we write, share, collaborate, publish, and participate today and in the future.

As with any argument, the opportunity arises to push, to question, and to consider, which is what we can see the educators in this collection doing. They are not necessarily accepting that "digital is" at face value, but rather engaging with this idea as a source of inquiry, exploration, and research. If digital is the way the world is today, what does that mean for learning? And for teaching?

This is why, as Antero Garcia tells us, there are more than "best practices" here. There are important practices and effective-in-their-context practices, as well as "there is a kernel of truth here, but maybe we will approach it differently next time" practices. These are active practices, practices that require opportunities to test, to tinker, to innovate, and to dynamically assess and reiterate.

As the curators of this book also highlight for us, these are not simply random practices. They are propelled by a changing social and technological landscape. They have been shared in open online spaces among other educators. They are individual and/or classroom vignettes that also are available to be remixed or remade in other people's classrooms and contexts. Set next to each other, juxtaposed within a larger web collection or in an edited volume like this book, these practices become greater than the sum of their parts. We can see trends and the connected principles that cut across and through.

Communities of practice, such as the National Writing Project (NWP), have been working like this for years, long before digital curation and sharing was even a possibility. Opening our practices up for examination by ourselves and others is a common way of working that has developed over time, facilitated through the act of writing and actively making our work visible to each other. These social and participatory practices of composing, sharing, and juxtaposing have, over time, allowed the NWP to support a continually growing set of educators to both deepen and innovate their own work and practices (Lieberman and Wood 2002; McDonald, Buchanan, and Sterling 2004; DeVoss, Eidman-Aadahl, and Hicks 2010).

Now in a digitally mediated era, our network continues to expand and innovate through the various digital modes and social media available today—opportunities that constantly introduce new ways of thinking and, therefore, slowly change and shift the ways that we define and describe ourselves as networked communities of practice. Online environments such as *Digital Is* are just one of the ways we've been reimagining our connections. Our collective thinking is pushed as, for example, the *Digital Is* collection increasingly includes the digital literacy practices not only of formal in-school educators, but also of informal educators and teaching artists outside of school. This shift mirrors what is happening within our face-to-face communities too; we have learned that literacy and connected learning requires a much larger and more diverse community.

These explorations have also uncovered another deep and critical element amplified when networked, digitally mediated economies form—that knowledge is located everywhere and not in the hands of a select few. Certainly, content that has been created by those who are formally deemed individual experts in their field, whether in education or elsewhere, is important to increase access to for all learners, which now is even more possible in a digital and networked age and should happen. But we also know that non-expert knowledge and the variety of knowledge that learners bring to their learning journeys—at whatever age—can be a game-changer even in established fields and disciplines. Projects such as:

- YOUMedia: Teen learning spaces located in public centers such as libraries and museums, where youth explore, express, and create using digital media;
- Quest to Learn: First established as a public school in New York City, Q2L schools bring together students, educators, game designers, curriculum specialists, and parents to develop a "game-like" curriculum and learning environment;
- Enquiring Minds: An approach to curriculum development, and a set of related resources, based in the UK;
- Youth Voices: An open online school-based social network for youth; and
- Hackademia: A learning group at the University of Washington that introduces mostly non-technical students to basic technical skills within an open-ended challenge

are all learning environments designed specifically to tap into those knowledge bases by leveraging learner interests and creative production, while simultaneously networking and connecting learners with wider circles of experience and expertise.

In traditional education and educational institutions, this process does change the game. As educator Ben Williamson points out, networked tools and new technology give us—teachers and learners alike—the unprecedented ability to position ourselves "as authors and editors of curricular content based on [our] own authentic cultures and patterns of participation" (Williamson 2011). No longer is the teacher the only conveyor, the library the only holder, or the museum the only curator of knowledge. Instead the ability to convey, to hold, and to curate now is in the hands of many. This also is why the social and participatory framework of connected learning positions all learners, students, and teachers alike not only as consumers, but as makers.

As the authors of *Connected Learning: An Agenda for Research and Design* warn, however, "[w] ithout a proactive educational reform agenda that begins with questions of equity, leverages both in-school and out-of-school learning, and embraces the opportunities new media offer for learning, we risk a growth in educational alienation by our most vulnerable populations" (Ito et al. 2013:7). If the power to create and to connect is critical to establishing equity in our classrooms, learning environments, and society at large, then we, as educators, have an amazing opportunity, as well as an imperative, to lead. This leadership depends on tapping into our deep wells of historically important and longstanding pedagogical knowledge and experience while pushing to expand our understandings and visions for what it means to learn and to teach today.

Teaching in the Connected Learning Classroom and *Digital Is* are intended to contribute to our individual and collective capacity building through providing points of inquiry and exploration. And we invite your continued participation.

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Janelle Bence has been teaching for thirteen years in both urban and suburban school districts. Her passion is teaching writing and offering her learners authentic learning experiences where they have opportunities to make meaningful changes in the world. She is an active member of the North Star of Texas Writing Project, the University of North Texas National Writing Project site, where she serves on its technology team and is active on both the local and national level. She received her undergrad-uate degree from Vassar College in Poughkeepsie, NY and her master's in Education for Teaching from UTA. Janelle has presented at many national conferences such as NWP, NCTE, and SITE. She enjoys reading, writing, exercising, and spending time with her family, especially her adorable son, Isaac.

BRYCE (formally known as Bryce Anderson-Small) is the founder and Executive Director of the HERU Organization, a youth media literacy organization that empowers youth for leadership and entrepreneurship through media deconstruction and digital media skills development. He is a board member of 5E Gallery and MBAD African Bead Museum, as well as a founding member of the Detroit Future Youth Network. Through HERU, Bryce partners with East Michigan Environmental Action Council (EMEAC). As a professional record producer, BRYCE has placed more than 30 instrumental works on various Viacom cable networks. In 2011, he founded Detroit Recordings Company, a twenty-first-century entertainment recordings company whose media promotes positive points of self-identification and constructive community behaviors. He graduated with a B.S. in Finance/Banking from Hampton University in 2001.

Christina Cantrill is a Senior Program Associate for National Programs at the National Writing Project (NWP) and is the co-founder of the NWP Digital Is website (digitalis.nwp.org). Supported by the MacArthur Foundation's Digital Media and Learning Initiative, Digital Is explores digital literacy and connected learning. Christina brings a long history of leadership in the area of digital media and learning and was a key member of the team that fostered NWP's innovations in this area as early as the 1990s. As a maker, puppeteer, and former chair of the board of directors at Spiral Q Puppet Theater, she also brings a background in community-based arts and social justice work, as well as nonprofit governance and organizing.

Gail Desler is a technology coach for the Elk Grove Unified School District. She also is the cofacilitator of the Digital ID project (http://digital-id.wikispaces.com). Her passion for supporting students in becoming digital "change writers" stems from her long-time association with the Area 3 Writing Project and National Writing Project.

Danielle Filipiak is a doctoral student in English Education at Teachers College, Columbia University, where she serves as an adjunct faculty member and Zankel fellow with the Student Press Initiative. She also works for the National Writing Project as a Connected Learning Ambassador and consultant. Previously, she taught English for ten years in Detroit. She is interested in digital literacies and youth civic engagement.

Antero Garcia is an assistant professor in the English department at Colorado State University in Fort Collins. His recent research focuses on critical literacies, technology, and youth civic engagement. For eight years, he was a teacher at a public high school in South Central Los Angeles. In 2008, Antero co-developed the Black Cloud Game. A Digital Media and Learning Competition award recipient, the Black Cloud provoked students to take real-time assessment of air quality in their community. Using custom-developed sensors that measure and send data about air quality, students critically analyzed the role pollution played in their daily lives and presented recommendations to their community. He is a 2012-2014 Cultivating New Voices Among Scholars of Color fellow with the National Council of Teachers of English and a 2010-2011 U.S. Department of Education Teaching Ambassador Fellow. Antero's numerous publications and conference presentations address technology, educational equity, youth participatory action research, and critical media literacy.

Chelsea Geier is an undergraduate student at Colorado State University, studying English Education and Spanish. She participates in a social justice leadership program, and has attended social justice and leadership retreats, and studied abroad in Argentina. She regularly draws on her knowledge of Spanish to help English Language Learner students in the classroom and is embarking on student teaching with the goal of incorporating culturally responsive teaching into the classroom.

Bud Hunt is an instructional technologist for the St. Vrain Valley School District in northern Colorado. Formerly, he taught high-school language arts and journalism at Olde Columbine High School in Longmont, Colorado. He is a teacher-consultant with the Colorado State University Writing Project, an affiliate of the National Writing Project, a group working to improve the teaching of writing in schools via regular and meaningful professional development. Bud is a former co-editor of the New Voices column of English Journal, a publication of the National Council of Teachers of English, and a co-founder of Learning 2.0: A Colorado Conversation.

Chuck Jurich is part of the High Desert Writing Project and an assistant professor of Elementary Education at the University of Alaska Fairbanks. His research interests focus on a sociocultural perspective of new literacies practices. Prior to his work in higher education, Chuck was an elementary classroom teacher for eight years.

Nick Kremer is the Coordinator of Language Arts/Social Studies for Columbia Public Schools, after spending his earlier career teaching English/Government Link, Reading Enrichment, Creative Writing, and Success Center (an intervention program for at-risk ninth graders). Nick also is a doctoral student in English Education at the University of Missouri-Columbia, a member of the Missouri Writing Project, and an online instructor for MU Online, where he teaches Reading/ Writing/Teaching the Graphic Novel and Visual Literacy/Visual Culture.

Clifford Lee is an assistant professor of education at St. Mary's College of California and a Bay Area Writing Project teacher consultant. He is a former English, Social Studies, and Media Arts public high-school teacher in East Oakland, California. His research, teaching, and social justice work reflect his passion for transforming the educational and life trajectories of urban youth as he examines and creates opportunities for participants to engage in work at the intersections of critical literacies, computational thinking practices, and youth culture.

Adam Mackie was born in Anchorage, Alaska in 1980. He is a poet, teacher, writer, and researcher. Adam teaches rhetoric, composition, and literature and mentors teaching assistants at Colorado State University. He lives in Fort Collins with his wife, Margaret, and two children, Noah and Hazel.

Lacy Manship is a teacher-consultant and Associate Director with the University of North Carolina Charlotte Writing Project. Additionally, she teaches as a lecturer in the university's First Year Writing program. She holds a master's degree in Child and Family Studies from UNC Charlotte and National Board Certification as an Early Childhood Generalist. She is in the Urban Literacies doctoral program, also at UNC Charlotte, where her research focuses on intersections between play, equity, and literacies. **Christian McKay** is a doctoral student in Learning Sciences at Indiana University. Christian has come to the Creativity Labs team as a working sculptor with his MFA from California College of the Arts. This experience and his prior lives as a helicopter mechanic, arborist, foundryman, and high-school art teacher have helped shape his divergent thinking in education. Christian's research interests extend to design-based curriculum and creativity through craft and digital fabrication in the classroom. His current project is a collaboration with Bloomington Project School in Indiana to build a Fab Cart to bring digital fabrication technology into the classroom for K-8 children.

Katie McKay is a co-director and teacher-consultant with the Heart of Texas Writing Project. She holds a master's degree in Curriculum and Instruction from the University of Texas at Austin and is a National Board Certified teacher. Katie works as a Bilingual Title 1 teacher at Austin Discovery School. In her classrooms, Katie is dedicated to the integration of technology and to teaching for social justice.

Nicole Mirra is a University of California, Los Angeles Writing Project Fellow and has taught high-school English for five years in New York City and Los Angeles. She is a postdoctoral researcher in the Department of Education at UCLA and earned her Ph.D. from the department in 2012. Nicole also is the coordinator of the UCLA Council of Youth Research, a university-school partnership program that engages L.A. students and teachers in research aimed at challenging educational inequalities and fostering transformative civic engagement.

Mike Murawski is the founding author and editor of ArtMuseumTeaching.com, an art museum educator, and the Director of Education & Public Programs for the Portland Art Museum. Mike earned his M.A. and Ph.D. in Education from American University in Washington, D.C., focusing his research on educational theory and interdisciplinary learning in the arts. Mike is an active member of the Cultural Landscapes Collaboratory (CoLab), a multi-professional community that seeks to understand and make visible how creative communities of practice can become powerful innovators to address the educational challenges of the twenty-first century.

David Neisler is a pre-service teacher pursuing a master's degree in Education at Colorado State University. He holds a bachelor's degree in Arts in Communications from Westminster College and an associate's degree in Architectural Studies from Salt Lake Community College. His future teaching interests include English composition, drama, and computer-aided design. A reformed Luddite, David has through his studies gained an appreciation for the positive role that technology can play in a classroom and is beginning to see that devices such as tablets can be remarkably useful tools, possibly on par with the hammer and nail.

Cindy O'Donnell-Allen is a full professor in the English Department at Colorado State University, where she directs the CSU Writing Project. She was a secondary English teacher in Oklahoma for eleven years and became a member of the Oklahoma Writing Project in 1991. She serves on the National Writing Project Board of Directors. She co-chaired the NWP Teacher Inquiry Communities Network for several years. Cindy is the author of numerous articles and two books, *Tough Talk, Tough Texts: Teaching English to Change the World* and *The Book Companion: Fostering Strategic Readers in the Secondary Classroom.* Winner of several research awards, she has been a member of the editorial board for Research in the Teaching of English, an NCTE Promising Researcher, and a Spencer Dissertation Fellow. She co-chairs the NCTE Research Forum with Antero Garcia and serves as an NWP Connected Learning Ambassador.

Larissa Pahomov teaches students English and Journalism at the Science Leadership Academy in Philadelphia, an inquiry-driven, project-based 1:1 laptop school considered one of the pioneers of the School 2.0 movement. Larissa has presented at NCTE, ISTE, and EduCon, with a focus on using digital tools to promote authentic learning. She is a contributor to the National Writing Project's Digital Is website and has had her work published in English Journal.

Kylie Peppler is an assistant professor of learning sciences in the School of Education at Indiana University, Bloomington. An artist by training, she engages in research that focuses on the intersection of arts, new media, computation, and informal learning. She is coeditor of *The Computer Clubhouse: Constructionism and Creativity in Youth Communities* (Teachers College Press, 2009) and *Textile Messages: Dispatches from the World of E-Textiles and Education* (Peter Lang Publishing, 2013) and co-author on the upcoming four-volume curriculum collection *Interconnections: Understanding Systems through Digital Design* (MIT Press, 2014). Kylie received a Ph.D. in education from the University of California, Los Angeles.

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Robert Rivera-Amezola was a fourth-grade teacher for ten years in Philadelphia and a technology teacher for two years. Previously, he taught high-school English and history for three years in the Federated States of Micronesia. Robert left the classroom in 2012 to become a curriculum development specialist with the School District of Philadelphia. He is a doctoral student in the Graduate School of Education at the University of Pennsylvania.

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Christopher Working is a teacher-consultant with the Red Cedar Writing Project at Michigan State University. He holds a master's degree in Educational Technology from Grand Valley State University. He teaches third grade in Holland, Michigan, where he emphasizes digital literacies with his students. Christopher also is a contributing member to the Practicing Coaches Network with the Ottawa County Intermediate School District, promoting the reading and writing workshop process model for language arts instruction.