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7. COMIC BOOKS, TECHNOLOGY, AND DIALOGUE: ALTERNATIVE TOOLS FOR MEASURING ACHIEVEMENT IN A SPECIAL EDUCATION COMMUNITY

Abstract In this chapter, I discuss my research on the use of comic books with middle school students labeled with disabilities. I use autobiographical narratives, critical theory and students' lived experiences to highlight and argue that traditional ways of assessing students, based on measures of attendance, standardized curriculum, and standardized test scores - tend to segregate students based on their disability and academic ability. As the special education teacher and teacher researcher, my instructional approach coalesced creative writing, illustration, comic books, and technology within a dialogue framework. I use the activities involving comic books as alternative tools to assess the participants' academic achievement. Participants transformed from marginalized to productive learners, leaders, and co teachers. The findings demonstrate that understanding students' lived experiences within comic books enables me and other teachers to implement alternat8ive approaches to assessment to redesign classrooms to provide more welcoming environment for students.

The New York City Department of Education (NYCDOE) is home to over 1.1 million students. Around 138,000 students are classified with disabilities. Approximately, 23,000 students receive part or all of their education and services in District 75 (D75) (the citywide self-contained division for the severely disabled) in seclusion from the general student population. The Latino(a), and the Black students make up the bulk of this "special" population, as listed by *New York City Department of Education Statistical Summaries Home: 2006–2007 District 75 Citywide School Region breakdown by ethnicity and gender as of 10/31/2007.* These two student groups are profiled according to the United States Census Bureau (2007), as living in poverty and represent a high percentage of the population classified with the most severe disabilities and absenteeism in the self-contained division.

SCIENTIFIC RESEARCH – INTERPRETATION OF TEST SCORES

The Individuals with Disabilities Education Act (IDEA 1997) emphasizes testing and academic achievement through the use of technology as an educational tool. This assertion is justified in terms of scientific research. The enforcement of

K. Tobin et al., (Eds.), Transforming Urban Education, 107–125.

academic standards and measurements into policy enforces the "norm" or White upper and middle class academic principles (Kincheloe and Steinberg 1997). While it is the responsibility of the federal government to react to the growing needs of an increasingly more diverse society, historically speaking this country does not embrace racial, educational differences, economic or social changes equitably (Ferguson 2000). According to Ferguson, the school system is created around a dominant cultural hegemony that holds White middle class culture to be the norm and does not acknowledge cultural differences.

Sandra Harding (1998) identified scientific research as the main problem with the American education system. She explained how the products of scientific research have often been used to benefit those in power and oppress or exclude those already on the margin. According to Madison (1988) it is important to understand how data (test scores) are interpreted. He questioned why certain interpretations of data are more readily accepted, while others are dismissed. Proponents of using scientific research in assessment argue that it could be used as a powerful tool that aims at maintaining the world as orderly and rational as possible (Skrtic 1995). This viewpoint serves the purpose of a few who are capable of high achievement and is set firmly in the culture of education (Madison 1988). A perfect and orderly educational system does not have room for or the capacity to care for students with differences. Given that schools are considered to be orderly and disabilities are considered to be pathological, stakeholders are able to design solutions they deem appropriate for these children. This positivist framework creates ways to categorize students with disabilities and highlight special education settings as a "safety valve" (Skrtic 1995) to contain recalcitrant or low-achieving students and prevent contamination of the good student population. The safety valve or sorting system also prepares children for their place in the social hierarchy (Ferguson 2000). In the long run, the results are higher dropout rates. In June 2005, *The Advocates for Children* filed a report that looked at dropout and graduation rates of self-contained students in New York City who receive special education services. The report relied on data provided by the New York City Department of Education, which indicated that the graduation rate for students with disabilities is lower than the rate of almost every other state in the country. The data also demonstrated that Black and Latino students graduate with diplomas at a far lower rate than Asian and White students who received special education services in New York City.

According to the IDEA (1997), which is a law ensuring services to children with disabilities throughout the nation, poor students of color are 2 to 3 times more likely to be identified by their teacher as having emotional disorders or mental retardation than their White counterparts. The overall delivery of special education services seems to be driven by two types of services, the medical model and social system model. Skrtic (1995) argues that special education's knowledge traditions are "grounded in psychology and biology (medicine), which means that special educators presuppose that school failure is pathological, and school organizations are rational" (p. 68). According to the National Research Council, the medical model positions children with disabilities as having an intrinsic condition that will respond to treatment, such

as, therapy or resource room services (Donovan and Cross 2002). This view of the pathology of disability creates an unequal educational opportunity for those students subjugated to the special education ranks. The social system model conceptualizes students classified with emotional or behavioral disturbances in terms of external social structures (e.g., poverty, class, disability, parental educational status, and race) that interfere with learning (McDonnell, McLaughlin, and Morrison 1997). In this sense, the students' external social environment is the main focus and considered the cause of their disabilities.

As a D75 teacher, I witnessed the negative impact of segregation or self-containment. I contend that school absenteeism compounded with a disability, poverty, lack of educational role models, low parental interest, and unsteady home life are some of the catalysts that negatively impact the educational lives and academic results of urban students (Wilson 1996). Other common characteristics of self-contained students that affect both reading and writing are problems with attention, memory, and organization (Bay and Bryan 1992). According to the 2007–08 schools' report card (New York City Department of Education 2008), my school, PS/MS South Bronx (all names are fictitious unless otherwise noted) had 378 students who performed at levels 1 and 2 on both English Language Arts and Math tests. Researchers who study academic achievement and test scores have found them depressing (Hanushek 1997). To remedy the situation, the United States Department of Education values technology as a means to improve student academic achievements in schools (IDEA 2004).

The *No Child Left Behind Act* (NCLB 2001), sections 1111(b)(2)(B) 1111(b)(2)(C)(v) (2001), and IDEA (2004), section 111(b)(2)(G)) (2004) emphasize student academic achievement as a priority and require annual academic assessment of all students with disabilities. The NCLB and IDEA highlight the following as the vehicle to student success: 1) technology as an academic tool; 2) technically skilled certified teachers; and 3) scientifically-based research methods in teacher training.

This chapter highlights a study that took place in my school in a response to the policy push for technology as an academic tool. The six-week study involved D75 students from different educational settings, called the *Comic Book Research Dialogue Group* (CBRGD). The study focused on the learning and development of literacy skills through the creation of computerized comic books. The findings are in two distinct and intertwining parts: first, dialogue, literacy, and technology coalesce as teaching strategies to help marginalized students; and second, the transformation of D75 students into leaders and coteachers. I used the CBRDG activities as alternative tools to measure academic achievement.

OVERVIEW OF CBRDG

The research was conducted at PS/MS South Bronx, a D75 self-contained elementary and middle special education school (grades kindergarten to eighth). The school is located in the South Bronx, the highest poverty area of the Bronx. In

2000, the United States Census Bureau reported the median income per family for the Bronx as $28,173 the lowest among the five boroughs. In CBRDG, I explored the academic, and personal development of three students, Brock and Stewie, who are D75 students attending general education classes (known as Inclusion) and KK who attends a self-contained class. In this way, I am able to understand "learning" within the contexts of their respective educational settings. In this chapter I interpret the CBRDG in the context of students' lived experiences, and at the same time provide a critique of policy tools in order to refute scientifically based research and educational segregation.

Participants and consent

The CBRDG group consisted of me, as a teacher/ researcher and a volunteer group of D75 sixth grade students (four boys and one girl) – Stewie, Brock, Elliot, Daniel, and KK. There were three Latino boys, one Black boy, and one Latina girl. Due to Brock and Stewie's regular attendance, I chose to follow their progress. Each student returned a signed consent form that discussed the procedure of study and the gathering of data and collection of comic book artifacts. Additionally, permission to conduct the research was obtained from the building supervisor and District office.

Location and time frame

The CBRDG met in the school's computer lab, which is split into two sections – one half has 12–14 desks-chairs combinations to facilitate discussions and simple instructions, and the other half had between 12–14 working computers with CD-ROMs and DVDs at one time, two printers, Smartboard, and scanner.

Instructional procedure

A six-week outline was created to dictate the flow of activities. Lesson plans were generated as a guide to the unfolding of weekly dialogue on the individual comic books, technology instructions on the various devices and applications (Microsoft Word, PowerPoint, scanner), and the development of the writing structure. Blank comic strips were designed, and colored pencils, markers and other tools were provided to assist students with the creation of their comic strips.

DATA COLLECTION AND ANALYSIS

To capture the qualitative data for an interpretive descriptive approach, the sessions were video and audio taped to identify the teacher-student dialogue process, creative writing process, peer-to-peer dialogue interactions, technology training, and students' interfacing with academics and technology. Erickson (1998) affirms that "an effective data collection includes many different sources" to support one's claims (p. 1158).

Informed by Guba and Lincoln (1989), I blend multiple methods and data sources to increase the reliability and validity of my interpretation as well as to establish trustworthiness of the data. The videotapes were transcribed using Windows Movie Maker editing software. The software enabled me to split larger video data clips into smaller more manageable data clips for coding, identifying individual and group interactions and to capture photographs of the different activities. The students and instructor analyzed the ways that students normally interacted with new classroom topics and re-analyzed similar learning interactions after co-generating ways of integrating technology and literacy into their worlds.

Artifacts

The end product is the computer-generated comic book. Other artifacts include recorded activities in my teacher's journal, collection of the handwritten work (summaries, character descriptions, images, and comic strip draft.) Such data afforded invaluable insights into the creative and writing processes used by students during the project.

Trustworthiness and authenticity criteria

Urban students living in poverty and classified with disabilities probably know that "it is quite possible to want, even to need, to act, but to lack the power to do so in any meaningful way" (Guba and Lincoln 1989, p. 250). This study is concerned with catalytic authenticity, which can be defined as action and change in the social transformation of student agency and group members' identity re/construction. During the research activities with the members of CBRDG, my primary concern was that the data collected and analyzed would potentially improve students' immediate lifeworld conditions. It is through participation in this study that students' agency can increase.

TOOLS FOR ACCESSING AND MEASURING ABILITY

In the CBRDG, the participants came to the group with a variety of technical skills and other strengths that did not readily transfer into the academic setting (Epstein and Rudolph 2001). As the teacher of the group, I had to find a way for the participants to utilize their set of technical skills as a tool to access literacy. Although a multitude of definitions exist related to literacy, my study focused primarily on the fusion of literacy and technology to create computerized comics.

Comic books

The "CB" in CBRDG stands for comic book. Research on the use of comic books as an instructional text in the classroom, is known to have positive impact on improving student's literacy skills (STARR 2004). According to *The International Reading Association* (2000), it is the responsibility of teachers to equip themselves

with alternative teaching strategies that can transform the classroom by incorporating students' skills to address learning. The two components to a comic book are the texts and the illustrations. The illustrations assist students in developing visual literacy (Arizpe 2001). In turn, visual literacy can help students to express their thoughts, which can facilitate text development and reading skills. The artwork or images enable the participants to access higher order thinking skills (Bloom 1984). As a result, they are able to analyze the images to sequence, decode, comprehend and infer the storyline (Piro 2002). In the research group the students used their imagination to create images that had particular meanings to them. As a result they were able to analyze their images and associated text in a form of a storyline. The ability to create a storyline – reading and writing, analyzing and comprehending words – became a powerful vehicle for teaching literacy strategies. In CBRDG the students learned to read and write through their own created image and text connections (Semali 2003).

TECHNOLOGY

To finish the comic books, computer applications and other technical devices were used. The CBRDG used available technology devices and applications in the school's computer lab. I considered finished products, i.e., computerized comic books, as a combination of reading, writing, images, and comic strip format created on a computer. Postman (1993) separated technology into two distinct categories of manmade creations – invisible "high" and visible "low." The visible technologies are the physical and easily manipulated tool-based application products such as books, Smartboard, web browser, Microsoft Word, PowerPoint, scanner. Technologies also include hardware like monitors, laptops, printers, projectors, handheld devices, and other tangible components.

A COMMUNITY BRIDGED LITERACY AND TECHNOLOGY

Lave and Wenger (1991) argue that learning is a situated activity involving sociocultural practices of a community; including relationships between newcomers and old timers. The purpose in formatting CBRDG as a learning community of practice rich academically, technologically, and socially was to empower all members to utilize their own cultures and knowledge while creating a space for inter-transfer of culture and learning. In my school students walk around with various technical devices, such as mobile phones, PSPs™, Sidekicks™, and handheld video games. However, I also notice that when students learn to use technology in ways not related to academic function, they appear incapable of transferring these skills to an academic arena (Wenger 1999).

INTEGRATING TECHNOLOGY WITH LITERACY

Data collection and analysis revealed the impact of different educational settings. In the CBRDG Brock and Stewie consistently interacted with technology to complete their computerized comic books. This section includes descriptive analyses of the

first group dialogue, mannerisms, sample writings and technology activities. At the beginning of the dialogue session, I was the focal point. As I initiated the discussion Brock, KK, and Stewie listened and participated at the appropriate openings. Daniel was absent from school and missed the first meeting. The only student without consent to be video or audio taped was Elliot. Thus, Elliot, under supervision, was in charge of the video equipment. The layout of the room dictated where we sat. Four minutes and eight seconds into the dialogue I prompted the group with a question about *what* would take place over the six-week session. The question created a space for participants to share their thoughts. As I spoke and shifted my attention between individuals there were many hand gestures, head nods, body movements, laughter, and eye gazes. Throughout the exchange, Brock and Stewie displayed signs of synchrony in body orientation, eye gazes, head nods, hand gestures, anticipatory speech, and verbal utterances.

Episode 1: Dialogue session one

Speaker	Event/Dialogue Text
Wilson	It is an open discussion group about what we are going to do over the next six weeks. What are going to do over the next six weeks?
Brock	Create a comic ((sits with his right leg on his left rocking. His right arm is on the desk and his left is braced on the chair as he looks directly at me while I address the group.))
Wilson	((Stewie also very attentive has his right arm rested on the desk; his left arm is on his lap, and he is swinging his legs.)) Yes, we are going to make comic books using technology. So in our group discussions we are going to talk about the writing process and your stories ((looking directly at Brock I ask a question while using my left hand to point to KK)) So, let's say, you Brock are sharing your story right – would you like KK over here to talk while you are telling us your story – would that be polite, KK? ((I turn my attention to KK and Stewie))
Brock	((Shakes his head while saying)) No.
KK	((Giggles, moves her shoulders and quietly said)) No.
Wilson	((Using my left hand I gesture for KK to speak up. Stewie and I giggle along with her. Brock shifts in his seat. His body is now positioned to face me.)) You have to speak up a little bit, they cannot hear you. KK, would it be polite to speak while he is sharing? … ((As I repeat the question KK answers yeah right away without fully comprehending the words))
KK	Yeah.
Wilson	Is it polite? ((My tone changed to imply a questionable answer in hopes that she would catch on. KK covers her mouth)) ((Realizing KK did not understand the question I rephrased it using hand gestures and facial expressions as she looks at me.)) If you are sharing your story would you want me to get up and walk away and do other things?

KK	No.
Wilson	No. So, it is all about respecting one another while we are in this space. Same as if Mr. O. is telling us something that is important. We have to listen carefully to what he is saying. ((I turn my head to look at each student and they shake their heads to my statement.)) So, the first thing we talked about was the main idea of the story. What book do you think you want to create?
Brock	Ninja. ((Stewie folds his hands in front of him and continues looking and listening to Brock while KK shakes her head and gestures two peace signs to the camera))
Wilson	A Ninja book? Okay, what about the ninjas, what do you think they will do?
Brock	Battle for world peace.

At the beginning of this vignette, Brock, Stewie, and KK's shyness were conveyed through their eyes and body movement. Their eyes and attention were focused on me. By the end of the discussion, it was evident that Brock, Stewie, and I experienced solidarity. This was particularly evident in the amount of activity displayed by them. Once they loosened up the camera faded into the background for Brock and Stewie. KK, however, began playing with the camera making peace signs and smiling faces. I initiated the discussion about the comic books. Brock immediately took advantage of a turn-taking opportunity indicated by my eye contact with the group. He zeroed in the focus of the discussion by stating his story idea. When Brock shared his story idea with the group KK looked at me, then Stewie, and back at me. I realized she wanted attention from Stewie as she displayed peace gestures to the camera. However, Stewie continued to focus on Brock. KK's playfulness with the camera breached her attention and group participation. The time she spent playing with the camera manifested in her inability to share her comic book story idea with the group. When she was asked to share she became shy and embarrassed. Brock noticed KK's behaviors while he shared his story outline. When she displayed shyness in response to the question, Brock showed verbal and physical annoyance and displeasure by sighing and rolling his eyes to her previous playfulness. The second time I rephrased the question to KK, Brock slapped his forehead in disbelief.

Not wanting to amplify KK's embarrassment, I focused attention on Stewie, who spoke softly at first. As Stewie briefly introduced his comic book story idea, Brock and KK gave him their focused attention. During the conversation I noticed that when students are in a mixed setting with a teacher led discussion they prefer to have inquiries made by the teacher rather than their peers. I realized the formal classroom teacher-student/question-answer repartee could overflow into CBRDG. The open dialogue format described at the beginning where peers can offer one another inquiry is foreign to these students. However, Brock did not shy away from asking Stewie the question, thereby demonstrating the promise of the new format for CBRDG.

LITERACY COMPONENT: CREATIVE WRITING

The first creative activity following the previously mentioned dialogue engaged the students into summarizing their comic books through illustration and text. The CBRDG and effects of segregation were immediately evident. Since the members were educated in different educational settings the shared learning space of the CBRDG played a prominent role in the enhancement of their individual academic, technological, and social skills. During the writing session Brock and Stewie immediately began writing without my assistance. However, KK required my support. It was paramount to the writing project for members to have an idea about their comics and share those ideas with the group. During the writing segment I made a noteworthy observation about an interaction between KK and myself. Although I did not stress the need to have correct grammar, punctuation or spelling I spent a great deal of time assisting KK to explore her imagination and write her basic ideas.

Reviewing the video segment enabled me to notice the physical activity of the students during the writing phase. As Brock and Stewie wrote their summaries that were shared during the dialogue phase I began to understand that each child processes information differently. Brock folds his left arm to his chest on the desk and rests his head comfortably on it. He is silent and engaged in writing. Brock's mouth moves without words as he rereads his work and occasionally erases what does not make sense to him. This section of the video segment covers 12 minutes. Stewie is also fully immersed in his thoughts and writing. Being left handed on a right-handed desk, he repositions himself to support his writing arm. Holding the paper with his right hand, he is able to write comfortably. Brock and Stewie's body positions are in full writing mode. Their legs extend back and their bodies lean forward.

KK is not writing. Folding her right leg under her left, KK's upper body slouches forward as she occasionally looks at me. Unlike Brock and Stewie the distance between KK's hands, face, and the paper demonstrates that she is not fully engaged. When I notice her, our eyes lock, and she shrugs her shoulders. Tilting her head a little to the right KK arches her eyebrows in a way that indicates she needs help. I begin to help her. As we start to work it is clear that she does not know where or how to start her summary. Her confusion appears to be a result of not fully participating in the dialogue when others shared their story summaries. I anticipated that KK would have difficulty writing her summary. During the dialogue Brock discussed his Ninja plot and Stewie talked about the boy who goes into TV world. However, KK did not have an idea. Although she came up with the idea about a girl leader, KK did not know how to expand it into a summary.

I get up to walk around to view the students' work from a different perspective. KK gets my attention by tapping her pencil on the table and looking at me. Her facial expression indicates she does not want me to go; she wants me to sit and help her. KK's left hand is holding the paper and her right hand depicts some writing as I sit with her. However, her right hand moves away from the paper to the edge of the table where she begins tapping. Brock continues writing, but Stewie stops to observe the

exchange between KK and me. The only change in his posture is the motion of his head. Stewie's pencil remains in writing position as his right hand holds the paper. Stewie is looking at KK. His attention shifts because KK begins tapping on the desk as she increases her volume to speak to me.

At the time, I did not notice the fear that manifested itself in KK's posture. She is tense, nervous, and doubtful of her own abilities. Her shoulders are raised and held tightly against her neck. Although she is looking at me, her head is not tilted upwards to speak. Only KK's eyes are shyly averted toward me. At the end of the writing session, Brock and Stewie display their completed handwritten summaries. During the dialogue session they shared their comic book ideas. As a result, Brock and Stewie were able to create simple illustrations that helped them extend their ideas into text. Brock titled his comic book "Clash of Ninjas" and Stewie named his "A Real Child in Television."

Brock and Stewie's story summaries are well-organized with a good beginning, middle, and ending. They fully understood the concept of writing a summary. Brock and Stewie did not write a long story. Rather, each wrote a paragraph with sufficient details that supported their titles. Brock and Stewie's voices as writers are evident. Both students used their imagination and personal interests. Brock's story focuses on two ninja teams – one good from Japan and one evil from China. The team from China tries to claim Japan which begins a war. Stewie's story is about a young boy who enjoys watching children's television. And, when his favorite channel is threatened with invasion from the sci-fi network he must save his channel. While Brock and Stewie demonstrate difficulty with spelling, they are able to spell phonetically. They show knowledge of basic sight words. During teacher-student and student-student interactions, several literacy skills (spelling, punctuation, plot development) were addressed. I was conscious not to impose my thoughts and opinions on their storylines. I wanted them to completely express their thought and ideas through their writing and images and not what they thought I wanted them to create. It was important to me not to trample or truncate their agency. KK, on the other hand, could not compose her story's summary independently. Due to her disability, she had a neurological breakdown between the brain and hand; she could not put her story on paper in the traditional way.

The technology component

During week two, I introduced MS Word and some basic functions to complete a document. These steps included – creating and naming their own folders, opening the application, typing their summaries, running a spell check, and saving work to their folders. My desire was to integrate technology knowledge and skills in an easy, user-friendly manner that could lead the students to further investigate the different functions of the application. As the teacher, I had to find a way for the participants to utilize their set of technical skills as a tool to access literacy. Immediately, Brock and Stewie were excited to type their handwritten summaries. I observed the students'

interactions with the computers as they typed their summaries. Prior to printing their summaries, the students read each others' work and helped with spelling and adding more information to enhance the story.

As Brock and Stewie rewrote their summaries using the word processing application they made use of the spell-checker and other style features. Literacy issues and formatting were addressed through the integration of technology with literacy. Fortunately for Brock and Stewie, there was technology available to help them overcome some writing obstacles allowing the process writing approach in the CBRDG to integrate technology with literacy skills.

Brock's typed summary displayed a standard format. He included a heading, title, and paragraph. The only formatting feature used was the center function for the paragraph. On the other hand, Stewie's work was more stylistic. He made use of the table feature to create three sections. Stewie titled each section as the beginning, middle, and conclusion. He also highlighted the words using the Bold feature and added borders to the table and rows.

In addition to completing their writing and comic books Brock and Stewie expanded their knowledge and skills of the different technology applications. In turn, through their participation in the CBRDG, Brock and Stewie demonstrated mastery of their knowledge and skills by spontaneously leading the group and coteaching members who needed assistance. The transition from a participant to a leader encouraged me to further analyze the dynamics of the CBRDG. The intense review enabled me to highlight individual activities and marked skills of Brock and Stewie as alternative ways to view academic achievement.

In the next section, I focus on Brock and Stewie's individual development (e.g., literacy and technology skills, leadership, coteaching, and membership) because these enactments are not usually associated with students labeled as emotionally disturbed. I use evidence of these enactments as a tool to argue against that policy and school-level structures invalidate lived experiences as academic achievements in favor of scientifically based results.

SUCCESS AS IT IS MEASURED THROUGH MY SOCIOCULTURAL FRAMEWORK

As a teacher/researcher and participant in the CBRDG I witnessed how the lived experiences of students labeled with disabilities interconnect with learning technology and literacy skills. Over a six-week period the members were able to improve their technology skills with the help of a skilled technology teacher and various technology devices and applications. The group also learned how to write storyline components in comic book style, how to computerize their comic books, and how to manage their time in completing projects. While all members acquired skills in this time period Brock and Stewie reached unexpected levels of expertise in a short period of time. Unfortunately, at the school and government levels, such achievements are not acknowledged.

The tools mandated by the government to define achievement in public schools are attendance, standardized curriculum, and standardized test scores. In the following section, I use the Brock and Stewie's enactment of learning as evidence to refute deficit perspectives of special education students at the higher levels. In the CBRDG the students' lived experiences of learning and accomplishment were related to four general measurements – attendance, applied learning, achievement, and promotion.

ATTENDANCE

Attendance is salient to student learning; the video and audio taped data collection serendipitously isolate and record student attendance. In the CBRDG each session was dedicated to exploring a new facet of technology. Brock and Stewie attended all sessions. KK was in attendance weeks three and six, Daniel participated in weeks two, three, and six, and Elliot in weeks four and six. In the CBRDG the six-week curriculum covered various technology applications, equipment, and writing. Their regular attendance and active participation proved to be crucial to the learning of different technology applications and language necessary to create their comic books. Brock and Stewie's regular attendance and active participation enabled them to emerge as skilled leaders and coteachers in the group.

APPLIED LEARNING - KNOWLEDGE IN ACTION

Applied learning refers to how much and how well each student learned and applied technology/literacy skills during the six-week curriculum. In the CBRDG, group dialogue enhanced the students' writing and technology abilities. Then applied learning measured how each student applied the new knowledge toward the completion of his or her comic books. Brock and Stewie enacted the CBRDG's curricula in ways that expanded their learning. Both students demonstrated their newly acquired technology and writing knowledge by working independently to handwrite their comic book summaries and use MS Word to computerize their comic book information and different features to self-correct their writing. Also, following the training sessions on scanning, PowerPoint, and the MS Office environment, Stewie and Brock were able to independently work on the completion of computerized comic books with little assistance. They also demonstrated their skills and knowledge in front of the group while entertaining questions.

ACHIEVEMENT

As a measure of achievement in the CBRDG I examined evidence of student emergence from novice learners to peer tutors and leaders. At the beginning of the CBRDG, I provided instruction in technology and literacy knowledge and skills required for members of the CBRDG to complete their projects. However, as time passed and Brock and Stewie's knowledge and skills evolved they become

active participating members and experienced a role-switch from novice to expert. Their newly acquired technology and literacy expertise enabled them to work independently and eventually to assist other members in working on their projects. Brock and Stewie's appetite for learning and desire to finish their comic book projects propelled them ahead of the others. Knowing that we were on schedule and I believed in teaching everyone at the same time Brock and Stewie became assistants in the group. Thus, the developing group members benefited from same-age tutoring by Brock and Stewie. The emotional and psychological improvements of the group members changed. Learning technology functions and literacy skills from the teacher and having their new knowledge reinforced by their peers enhanced self-esteem. Brock trained Daniel, who was frequently absent, on the functions of MS Word. When KK struggled with scanning her documents, Brock realized her difficulty and immediately offered assistance. As a result, KK was able to enact micro level learning by following instructions from Brock and independently using the scanning hardware and software.

PROMOTION - COMPLETED COMIC BOOKS

I define promotion as the attainment and maintenance of a privileged position in the group because an individual holds symbolic capital, expertise, and social bonds through working successfully in a group. In the CBRDG, promotion came about as a result of successful completion of the comic book project. Based on the video data, I focused on the evolution of Brock and Stewie from students who learned technology to users of technology. They continued to evolve into coteachers in the group. This transformation resulted in their elevation in status to experts and leaders in the group. Brock and Stewie achieved expert level technology knowledge and skills that they shared with their peers. In addition, the completion of the computerized comic book was a considerable accomplishment for both Brock and Stewie.

Brock and Stewie's micro enactment seemed to connect them more fully to the practices and learning process in the CBRDG. They were able to create and finish their comic books using multiple technology devices and applications. Brock and Stewie used MS Word, PowerPoint, and a shared directory to provide others with access to their work. Brock shared his computerized comic book in flat paper format while entertaining questions from others. Stewie was able to present his comic to the group via PowerPoint on the Smartboard. It is noteworthy that urban students in D75 are generally not perceived as having the ability to create social networks by sharing learned information with others, assisting peers, or developing skills associated with academic achievement.

INTERPRETING CBRDG'S MEMBERS LIVED EXPERIENCES

The lived experiences of the participating students in the CBRDG have provided me with a new perspective on technology, learning, and social behaviors of students

labeled with disabilities. According to van Manen (1990), government and school reliance on the disability usurps the lived experiences of students with disabilities. The caveat here is that technology is not magical and although the policy mandates that the use of technology in education is academically transformative, it might not be able to captivate all students' attention. I witnessed capital exchange (learning technology from me and each other), active individual and collaborative engagement with technology (e.g., using MS Office and the Smartboard), and peer teaching (e.g., Stewie coaching Daniel in MS Word). In this respect, as the teacher, I had to be willing to release some of the power that comes with my role and allow individuals in the group to be agentic. This required me valuing capital that students brought to CBRDG. Brock established the CBRDG structure in which he enacted coteaching that supported KK's learning. Also, my technical knowledge as a teacher and researcher was enriched by the lived experiences (e.g., practices, dialogues, membership) of the CBRDG that informed my work, language, and power (van Manen 1990). In focusing on the nature of lived experiences in the CBRDG, I have "given over to some quest, a true task, a deep questioning of something that restores an original sense of what it means to be a thinker and researcher" (p. 31) and teacher. As van Manen (1990) suggests, students are encouraged to dialogue as a way to describe their experiences located within specific situations. The following is an excerpt from the last dialogue as a group.

Episode 2: Expanded students' roles in the CBRDG

Speaker	Event/Dialogue Text
Wilson	How do you guys feel about the comic books?
Stewie	Well, I feel excited, 'cause before, I did less work 'cause I had trouble. But now I know exactly what to do and I got more further ((Stewie speaks first and his voice is clear))
Wilson	What troubles were you having?
Stewie	Well, I had difficulties understanding what to do and how to draw things the way I wanted
Wilson	Did anybody help you?
Stewie	Yes.
Wilson	Who helped you?
Stewie	Brock.
Wilson	Brock helped? ((Wilson looks at Brock and asks))
	What did you help him with?
Brock	I helped him to understand how to scan. I helped him when he had some problems writing the summary. And that was pretty much it.

Wilson	Excellent. I am glad. So, what do you think was the most important thing you learned about the creation of a comic book?
Daniel	((Daniel says "oh, oh" and raises his hand at the same time. Then hesitantly speaks an answer the question.))
	Well the most important part about creating the comic book will have to probably be … I don't know … maybe Brock can answer it.
Brock	I think the most important part for me was making my conclusion. It was so hard that I actually had to put "to be continued."
Stewie	I think the most important thing I learned about the comic book was how to scan and how to plan it out
Wilson	So, what did you learn about planning?
Daniel	About planning?
Stewie	Well, first about planning out I had to brainstorm.
Wilson	((Shaking my head in agreement while repeating his words))
	You had to brainstorm.
Daniel	The most important or trouble?
Wilson	Either one
Daniel	Um, for me, the most trouble I had in planning was coming up with the title and what the story was going to be about - were they real. It was hard, I was asking like, [inaudible] it was really hard.
Stewie	How did you come up with colors of emotion?
Daniel	Yeah, uh, thank you. Well I picked the colors of emotion because …
Stewie	Or did you want to do a story about a kingdom using and exploring the colors and just put them together
Daniel	I did that

This episode is important because Stewie emerged as the leader as he directed questions to Daniel; his peers identified Brock as coteacher, and the students shared their appreciation for learning how to use technology to create a comic book. Although, I facilitated the dialogue in the group, Stewie changed the flow of the conversation by speaking first. Looking back at the video data, Stewie was a little shy and his voice was soft and low. However, as time progressed, he became a vocal, active, and central figure in the group. Stewie projected his voice clearly saying, "I feel excited." His feelings of excitement grew out of his positive experience of peer assistance, which enabled him to finish his comic. Stewie's statement "I feel excited" summarized many of the feelings that other students had about the production of their comic book. His comments appeared to reflect a need for action

among the group members. As he spoke, he acknowledged Brock's assistance. Then Brock spoke about the help he had given to Stewie. The rate at which the conversation switched focus was amazing and speaks to the ability of students to focus on an existent goal once they share a collective need for it. Next, the dialogue switched to Stewie inquiring about Daniel's comic book title. I sat back and listened to their conversation. I thought about how the teacher in a traditional classroom facilitates and controls the flow of conversation. The teacher gives the information then the student answers back. The student is oppressed and obligated to respond to the teacher. There is rarely an opportunity for student-to-student dialogue about their shared experiences. By creating a space where stakeholders can talk across the boundaries of disability and traditional classroom roles the CBRDG transformed the conventional educational setting into an arena where all participants had a vested interest.

CBRDG NOT A TRADITIONAL CLASSROOM

I realized that an orderly and well-managed classroom was equated to a learning environment. Controlled classrooms usually meant students remained quiet, in their seats, and were required to raise their hands to acquire the attention of adults. When environments are controlled like this, students are not permitted to freely explore their educational settings unless the teacher directs them to an activity. However, in CBRDG students were not restricted to a specific seat or area. Rather they were encouraged to explore their learning environment, as long as they did so with care. The educational differences between the students labeled as disabled who attended general education classes and those in a self-contained classroom were manifested in the CBRDG. Brock who was mainstreamed into regular education classes was not afraid to explore his surroundings. He walked around the lab, unaware or oblivious to the camera, accessing the different technologies. Brock also read the information that accompanied each item. Brock touched the items with respect and when he was unclear about something he inquired about it. On the other hand, KK who was situated in a restricted setting was very conscious of the camera and often played in front of it. At different times she looked at the camera, performed dance moves, or gestured peace signs. I believe her attitude toward school and her behaviors probably resulted from her experience as a student in a self-contained classroom setting.

CONCLUSION

"I find that the great thing in this world

is not so much where we *stand*,

as in what direction we are *moving."*

Oliver Wendell Holmes (1809–1894)

Both, NCLB and IDEA view the integration of technology into education as a revolutionary tool. While in the CBRDG the prospect of using technology to create a computer generated comic book brought the students together, my experience demonstrates that it is incapable of holding all students' attention during my instruction. This idea put forth by education policy fantasizes that technology might be magical and transformative. This is deceptive notion because not all students will be charmed by technology. Therefore, teachers must equip themselves with alternative teaching strategies to address a diverse learning environment. In this study Stewie and Brock were fully engaged with technology but KK was not. This supports my assertion that technology use in the classroom might not be able to hold all onlookers.

Brock and Stewie demonstrated significant academic competence through their use of technology. They initiated dialogue and demonstrated various technical skills through individual activities and by assisting their peers. The academic practices of the CBRDG cannot be quantified by governmental standards. Based on my exposure to both self-contained and inclusion classrooms I believe enactment of newly acquired skills (as demonstrated by the completion of their computerized comic books) may happen for Stewie and Brock in their general education classroom, but most likely will not happen in KK's classroom.

I use Holmes' quote to open this section because it sums up how I feel about the abilities of students classified with disabilities. At the beginning of this study I was focused on the learning and development of literacy skills through the creation of computerized comic books with D75 students. Fortunately, I was not held hostage by preconceived ideas about the students' conduct, old experiences, or false hopes about their learning. Instead, if I could understand the process by which the students' lived experiences were integrated in the CBRDG, I could begin to understand how to design an instructional matrix that is welcoming to teachers and students. I approached the phenomenon of student experiences in the CBRDG through investigation of their dialogue, technology skills, and work as well as their lived experiences as D75 students in different educational settings. We met as a group and we let our desire to learn from each other and our shared experiences lead us. I walked away from the CBRDG a renewed person and a better teacher and researcher. I thought I would be offering something brilliant to these students. However, they gave me something words cannot express.

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