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The Process of Video Integration with Students with Intellectual Disabilities: Experiences of Three Teachers

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EDRS 812, Spring 2007

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The world of technology grows rapidly. It is hard to imagine life without devices that have been considered highly technological and sophisticated in the recent past. Familiar technologies like TV and video can also be easy to use teaching tools that students benefit from and teachers are not afraid to use. Over the last three decades video formats have changed from videodiscs to videotapes; DVDs and computer-based videos. However, regardless of the format, video continues to be widely used in general and special education classrooms for teaching various academic (Lee, & Vail, 2005), functional (Graves, Collins, & Schuster, 2005), and behavioral skills (Maione, & Mirenda, 2006).

Video instruction was greatly transformed following the development and increased interest to "anchored instruction." Anchored instruction was conceptualized by the Cognition and Technology Group at Vanderbilt (CTGV, 1990). The information was offered to students through specifically designed video clips that provided an anchor to support students' previous knowledge (Moore, Rieth, & Ebeling, 1993). Several studies have found anchored instruction effective in increasing the performance of students with and without high-incidence disabilities in different academic areas (Bottge, Heinrichs, Mehta & Hung, 2002; Shyu, 2000).

While anchored instruction proves to be effective, video implementation with students with intellectual disabilities is limited to modeling and self-modeling (Hitchhock, Dowrick, & Prater, 2003; Mechling, 2005). Video modeling and self-modeling are reported to be effective tools for teaching behavioral and functional skills to students with low-incidence disabilities (Ayres & Langone, 2005; Van Laarhoven & Van Laarhoven-Myers, 2006; Wissick, Lloyd, & Kinzie, 1992). However, it is unclear whether students with intellectual disabilities could benefit from video clips embedded and integrated into content area instruction.

Statement of Problem

The No Child Left Behind Act (NCLB, 2001) and Individuals with Disabilities Education Act (IDEA, 2004) require students with disabilities, including those with intellectual disabilities to have access to general education and to make progress on academic content standards. In the state of Virginia, students with severe disabilities, who cannot participate in regular assessment procedures due to their abilities and needs, receive alternative assessment with variations on evaluated standards called Virginia Alternate Assessment Program (VAAP). While VAAP offers students adapted academic goals and objectives, the focus of education for students with disabilities has shifted from functional to academic performance (McLaughlin & Thurlow, 2003).

Various technological options exist to support inclusion of students with low-incidence disabilities into regular academic-based instruction (Wehmeyer, Smith, & Davies, 2005). Multiple presentation formats offered by video enhance comprehension, memory, and attention skills especially for students with intellectual disabilities (Moore, Rieth, & Ebeling, 1993). However, while some studies allude to the way video is used with that specific population (Embregts, 2000); the research on video integration in content area instruction to students with intellectual disabilities is quite limited.

It appears that generic video clips existing in various formats may not be appropriate for students with intellectual disabilities. They have to be adapted to meet the cognitive needs of this population of students. Thus, teachers willing to incorporate video clips into their content instruction are bound to spend extra time adapting and supplementing them. In an attempt to offer teachers an easier way to use video technology, I am developing a universally designed video enhancement toolkit program. Unfortunately, existing research often fails to provide a detailed description of the environment, in which video instruction is currently implemented. In order to continue with the development of the tool, it is crucial for me to learn how teachers

currently use video for teaching academic skills to students with intellectual disabilities as well as how they adapt and supplement such instruction.

Therefore, this study attempts to accomplish the following goals: a) to contribute to the current knowledge of teachers' experiences and perceptions of the process of video adaptation and integration into content areas with students with intellectual disabilities (at the theoretical level); b) to gain sufficient insights from teachers in order to guide me through the software design and development process (at the practical level); and c) to provide me with a once in a lifetime opportunity to be involved in program design and development (at the personal level).

Purpose Statement and Research Questions

The overarching purpose of this study is to explore the ways teachers currently use video for teaching academic skills to students with intellectual disabilities. I want to know how teachers integrate video clips into content lesson plans, how they design and create supplementary activities that are adapted to the needs of students with intellectual disabilities, and what past experiences and current perceptions teachers have about using video with this population.

Tentative research questions used for development of the interview guide include the following: 1) How do teachers of students with intellectual disabilities incorporate video technology in academic skills instruction? 2) In what ways do teachers of students with intellectual disabilities supplement video instruction? 3) What tools and strategies do teachers use to adapt existing video clips and/or supplementary activities to address needs of students with intellectual disabilities?

Researcher Identity

There are several reasons why I have chosen this topic for my pilot study. As a teacher, my experiences with video are limited to a non-academic use. Regardless of students'

characteristics, I have witnessed video being utilized as a free time, reinforcement, or preoccupation strategy in general and special education classrooms for students with various abilities and needs. However, my acceptance of video as a purely leisure activity in the school settings is challenged by existing research. As a scholar, I have discovered from a review of the literature that video instruction proves to be relatively effective for teaching various skills especially to students with disabilities.

As a researcher, the topic of video instruction and students with disabilities is selected based on professional relevance to my program of study and overall research interests. I am passionate about any technology applications for people with disabilities especially those that are affordable, widely available, and easy to use. As a professional, I seek information that would guide me through the development of a video enhancement toolkit program. I crave any practical insights and suggestions from teachers that would allow me to create an appropriate and effective tool for them to use. As a visiting scholar from a foreign country with a very different education system, I hope to gain more support for my belief that even students with more severe intellectual disabilities can and must be educated!

Each aforementioned role I play frames the way I look at and think about my topic. I will attempt to explore how my personal experiences and subjectivity might have affected data collection and analysis in subsequent sections.

Methodology

In this section I discuss my methodological choices for this study. The critique of the process is embedded in each subsection as well as summarized at the end of the paper.

Design

Designing this study, I was interested in understanding teachers' experiences and perceptions of integrating video in content instruction for students with intellectual disabilities. I

hoped to explore and better understand the process of video integration in teaching academics to this group of students. The overarching purpose and specific research questions generated from both existing literature and personal experiences helped me to narrow focus on a data collection and analysis design (Glense, 2006). The study aimed to describe a specific situation in-depth but did not have a refined bounded system that circumscribed the investigation (Merriam, 1998). In its present design this research cannot be considered a case study although it has a potential to merge into one upon further development. I believe that I used the elements of descriptive case study in my research, as it is defined by Merriam. As mentioned above, little research exists on the process of video integration in academic areas with students with intellectual disabilities. So, with this study I was trying to create a detailed account of a sparsely investigated practice (Merriam). However, I feel that studying perceptions of teachers from different contexts (e.g., different grade levels, multiple disability categories) on the process of video use does not really constitute a bounded integrated system, and thus cannot be considered a case study (Glesne).

This pilot study represents initial attempts to gain an insight into the way video is currently used within a specific category of students and the perspectives of involved teachers. Thus, based on the Merriam's (1998) definitions of qualitative research types, this study fits under a generic qualitative research study category. Aligned with the characteristics of this research design, I anticipate that the "recurring patterns" (Merriam, p. 11) from the data will provide valuable information for the program design process, as well as for theoretical and practical implications of video instruction to students with intellectual disabilities.

My major critique of the design emerges from the findings. Looking ahead, I was able to find some recurring patterns. However, I believe my study would have been stronger if I used a purely descriptive case study design. Discovering the process of video integration would benefit from case study design because the variables are too embedded into each particular situation.

Merriam (1998) notes that case study design is particularly suitable for studying the process, as it largely depends on the context and participants. Indeed, I was interested more in the describing the process rather than an outcome.

Methods

Based on the purpose and tentative research questions guiding my study, I chose to conduct interviews with teachers of students with intellectual disabilities. Considering time and resource constrains, I believe, semistructured topical interviews allowed me to discover initial participants' experiences and perceptions on the process (Glesne, 2006; Merriam, 1998). I preferred semistructured interviews, because I was seeking some specific information (e.g., students' characteristics) as well as more open-ended responses related to participants' experiences and perceptions (e.g., experiences with video integration in content areas). I believe that allowed me to collect both standardized as well as emergent insights (Merriam).

I realize that observations and longer interviews would provide me with more in-depth information. According to both Glesne (2006) and Merriam (1998), those would be appropriate methods for a case study. My desire to conduct observations can be supported by the assumption that observations are beneficial for describing behaviors and events (Maxwell, 1998). It would be very helpful if I could observe teachers using video to corroborate their interviews as well as to better describe the context. However, unfortunately, such design and methods were not feasible in the present circumstances.

The development of interview questions was guided by the tentative research questions. They underwent a pre-pilot study with experts in the field. I asked two renowned experts in the field of technology for students with disabilities to look at my purpose of the study, research questions, and interview guide. They provided me with feedback on structure, clarity, and the topic-question fit of my interview questions (Glesne, 2006). In addition, after the first interview,

I slightly refined my interview guide, when I realized that I was placing too much emphasis on the idea of using video as a primary tool to instruction. Importance of video was my biggest expectation going into the study. It was generated by the existing literature as well as my emotional involvement into the video enhancement program development. Luckily, I was able to notice the perceptions of video as a supplementary tool developing from the very first interview, and thus keep my subjectivity bias under control. The final interview guide is attached in the Appendix A.

Considering Glesne's (2006) and Merriam's (1998) directions to designing research questions, I tried to avoid dichotomous, multiple, as well as leading types of questions. While I believe my research guide was well done as it appeared to produce the type of information I was seeking, I still missed couple yes/no questions (e.g., Do you feel comfortable integrating video) that provided me with little information. In the future, I need to spend more time looking through my questions and refining them. I understood the value of piloting the questions and overall study, as defined by Glesne, within close to reality situations.

Participants and Relationships

In order to recruit participants I have used criterion-based convenience sampling based on essential attributes as defined by Merriam (1998). The purposefully selected participants fit the following stratification criteria: a) must be a teacher of students with intellectual disabilities; b) must use video for the instruction in academic/content areas; c) must use video regularly (at least once a month, preferably more frequently). While this selection technique might have prevented me from getting the most information-rich cases, it seemed to be the only feasible way of conducting the study in the present circumstances. I chose convenience sampling for a practice (Glesne, 2006); however, if I had the chance to do it again, I would have chosen a *unique* selection technique as defined by Merriam. That way I could have explored unique ways of

video integration by outstanding teachers. According to Glesne, employing negative case analysis could increase the validity of my study. It would be very helpful to interview some teachers, who do not believe in using video in academic areas with students with intellectual disabilities. I am sure I would have discovered some issues that I have not considered. I would also consider using snowball sampling, asking my participants to nominate other outstanding professionals, who regularly integrate video in teaching content to students with intellectual disabilities.

Prior to beginning of this pilot study, I developed stratification criteria for selection of my participants. Supported by Glesne (2006), I tried not to over invest in specific characteristics for the selection procedure in attempt to sustain the emerging nature of a qualitative study. However, I came to a conclusion that my criteria were too generic for me to understand the process of video integration. Having teachers from different grade levels presented too much variability in data. Glesne states that the researcher should refine the selection criteria as the study emerges. I really wish I had time to narrow my selection criteria to at least one age group. I believe that would provide me with better insight into the process of video integration because academic needs and requirements vary significantly with the grade level.

My background in teaching students with learning disabilities limited the number of participants that I knew, who would qualify for participation in my study. Personally, I knew only one teacher who met my selection criteria. In accordance with my research approval from George Mason University (GMU) Human Subject Review Board (HSRB), I sent an invitation to participate through three listserv groups to recruit participants. Members of listserv groups that I chose represented former and current GMU students in various special education areas. Not all of them currently teach students, especially students with intellectual disabilities. Therefore, I asked those who received the invitation to forward the message to other teachers, who might

meet the criteria. The total number of members on all three listserv is more than 1,000 people. I felt that it was important for me to send an invitation to as many people as possible in order to recruit at least 3 teachers, who would fit the specific selection criteria. As I expected only 5 teachers, who used video in teaching students with intellectual disabilities, responded to my invitation to participate in this study. Three of them reported using video only for teaching functional skills or for simply recreational purposes. Perhaps there were no more teachers, who used video for teaching academics to this population, they did not have time for 45-60 minute interviews, or they chose not to respond to my request for other reasons (e.g., spring break vacation). I was left with only 2 participants from the listserv in addition to one teacher, whom I knew personally.

Participant # 1. Julie (pseudonym) is a teacher with more than 20 years of experience working with students with intellectual disabilities. She has been recognized with many special awards such as Teacher of the Year, Technology Outreach Program Support (TOPS) teacher, and STAR educator. Currently she is working in the K-1 non-categorical classroom with students with various disabilities. Some students have physical and/or cognitive disabilities. Her current students are not considered to have severe cognitive disabilities. None of them are in the Virginia Alternate Assessment Program (VAAP), as they are very young. I knew Julie shortly before the interview, as I was introduced to her by my program advisor. I was aware that Julie was using video with her students on a regular basis in teaching academics. She was the perfect candidate for my study.

Participant # 2. Janice (pseudonym) contacted me via email after receiving my invitation from her colleague. She stated that based on the description of my study she would love to participate in it. Janice has 24 years of teaching experience. She is currently teaching students with moderate to severe disabilities. They are high school level students with ages raging from

15 to 22. However, their mental age is anywhere from about 2 years to about 6 years old. Their disability categories include mental retardation (MR), autism with MR and multiple to severe disabilities. Janice's students have very few academic skills but are able to learn simple repetitive skills, such as sorting and other small jobs. Janice uses video for teaching life and social skills but has also started using it for teaching academics in accordance with the VAAP.

Participant # 3. Valerie (pseudonym) replied to the invitation email stating that as autism and LD teacher for science and history, she always begins a new unit showing an appropriate movie to aid her students in the learning of a new concept. At first I was hesitant to include Valerie into my study, because it seemed like she was working with higher-functioning students. However, after communicating this concern to her, she informed me that her previous teaching experience had been with lower-functioning students identified with autism and MR. Valerie has been teaching for 22 years. For the purposes of this study I asked her to focus on her students from a previous school year. Those students met the criteria of students with intellectual disabilities. They were 6th graders with many communication problems. None of them took the Standards of Learning (SOL) tests. All of them participated in VAAP.

When I started my data collection, I did not think much about the demographics of the teachers I interviewed. I asked all of them to describe the students they were working with in detail including students' abilities and needs, grade level, and disability categories. Throughout the interviews teachers shared their teaching experiences and areas of expertise with me. Although I was not looking for gender, race, teaching and/or technology experience, or subject matter differences, I found it helpful and will be sure to include it in my future research. After the interviews, all participants agreed to allow me to ask for follow-up questions via email. This strategy may be too cumbersome in a bigger study. Thus, I would need to spend more time considering what demographic information might be useful prior to the study.

Negotiation of relationship. Upon participant's informal agreement to partake in my study, I have sent all of them written informed consent document approved by the GMU HSRB. The research board waived the requirement of the signature on the consent document. That worked well for my telephone interviews. However, after several discussions in class, I felt uncomfortable with unrecorded participant's consent. For that reason, I asked the participants for a verbal agreement to allow me to audio record their interviews and use their data for the analysis. There verbal agreement was recorded for my records. In the future, regardless of HSRB decision, I would feel more comfortable with a signature or a written statement via email expressing their consent.

In the case of Julie, my program advisor was my gatekeeper as defined by Maxwell (2005). Due to a close private relationship with interviewee, he facilitated her participation in my study. However, she was not forced to participate. Julie heard about us planning the development of the video enhancement software program, and she was interested in participating in the process. I was introduced to her briefly but had no relationship with her prior to the study. Our initial conversation happened via email, where we specified the most convenient time for the interview.

I did not know my other two participants prior to them contacting me about the study. In all cases I was trying to be as flexible as I could to address the needs of my participants. I made sure I described the study briefly prior to the beginning of the interview. I have designed my interview guide to have easier questions at the beginning to allow participants to get comfortable and not intimidated by the interview process (Glesne, 2006). It was hard to build a rapport with my participants during the short interview over the telephone, but I believe my flexibility, study overview, and careful design of the interview process allowed my participants to feel comfortable with me and the whole interview process.

Data Collection Methods

The data for this study was generated from interviews with three special education teachers, who teach students with intellectual disabilities and use video on a regular basis in the content areas instruction. In addition, researcher's memos and reflection throughout the data collection and analysis were incorporated into the process. Originally I planned to collect samples of teachers' activities used to supplement video integration into content curriculum. I thought such artifacts would provide me with a better picture of video use, since I was unable to conduct teachers' observations during the process. However, two out of three participants did not have those activities in electronic format and could not share their work. Thus, I was left with no choice but to rely only on teachers' self-reporting of the video integration process.

Interviews. I expected one teacher, who I knew personally, to be an information-rich case. Thus, I chose to interview her first to help guide and refine my interview guide. After the first interview I began to notice that video might be just an add-on to instruction, not the primary instruction tool. So, I slightly adjusted my questions to eliminate stress on the value of video as the only tool. I believe that allowed me to receive more information from following interviews, as teachers were not intimidated by the term *video instruction*. The first interview took place on Friday afternoon in interviewee's house. It was not an ideal time. The teacher seemed visibly tired, but it was the time she requested. It was an extraordinary experience to conduct a face-to-face interview. I felt that it was much easier for me to follow the interview and be more attentive.

I conducted one face-to-face interview as required by the course assignment and decided to conduct the other two over the phone. I knew it would be different. However, since I recruited participants through a listserv, they were located in somewhat distant geographic areas. I could not offer them to meet at their school or any other place of their choice as I do not drive. In the future I will do everything in my power to avoid telephone interviews. While they were

answering my questions, I heard interviewees openly multitasking, from typing on the computer to cooking dinner and dropping pans. After transcribing the interviews it was obvious that in some spots the interviewees were not paying much attention to a question. Moreover, one of my participants was an example of a nonstop talker as described by Glesne (2006). I missed the opportunity to redirect her to the topic through body language.

Another advantage of a face-to-face interview was the ability to share resources and activities as my first participant did. Those resources and activities corroborated the teacher's descriptions of video use (Glesne, 2006). Originally I planned to ask all participants to share their supplementary activities. However, as I expected, teachers did not have those activities in electronic format, which prevented an activity exchange electronically. Thus, the ability to triangulate the data, as it is defined by Maxwell (2005), was impossible and interview data could not be better interpreted. According to Maxwell, this presented a validity threat to my study. The dates and length of each interview are listed in Table 1

Table 1

Participant Interview Schedule Detail

Participant	Date	Time	Duration	Setting
Julie	03/16/07	3:30 pm	1:22:00	Julie's house
Janice	04/11/07	2:00 pm	51:45	Phone interview
Valerie	04/18/07	8:00 pm	58:15	Phone interview

I recorded the face-to-face interview using *Olympus Digital Recorder*. For the phone interviews I used *Panasonic Telephone Cassette Recorder* that was plugged into the telephone in my office.

Although I claim to conduct semistructured interviews, it appears from my transcripts that they were more structured than I had planned. According to Maxwell (2005), a more

structured approach may ensure compatibility across participants rather than focusing on the phenomenon. It was important for me to have time to read and listen through the interview before I noticed dropped leads. Therefore, in my future studies I plan to have follow-up interviews scheduled in advance. That will give me an opportunity to follow up on the leads.

Memos and reflections. I did not take notes during the face-to-face interview because I felt it would distract me. It was easier to keep an interview log, as defined by Merriam (1998), during telephone interviews because I did not need to maintain eye contact. I found the log very helpful as I began to analyze my data and was able to use it to develop my tentative findings. My class reflections reminded me of my thoughts and concerns as I was learning the process of qualitative research. They allowed me to address things like ethical issues as the study emerged.

Despite my emotional attachment to particular outcomes, I tried hard to keep my subjectivity bias under control. I tried to remain neutral and open to my participants' experiences. I kept reminding myself not lead them to the responses I wanted to hear, as that would affect the validity of my study (Maxwell, 2005). However, there was one time when I shared my idea of video adaptations with picture-based captions with Janice and she loved the idea. It was an obvious lead, but I felt like that information was crucial for me as a designer of the program. I tried not to rely on Janice's response in that case during the data analysis. On a positive side, my background and experiences allowed me to establish stronger rapport with my participants. All of them shared with me titles of specific software programs they used to create supplementary activities. As I was familiar with all of them, participants did not have to spend time explaining those to me. One teacher mentioned in the follow-up email that she appreciated my preparedness and knowledge.

Data Analysis and Data Management

I attempted to analyze my data by using the constant comparative analysis (CCA) method.

According to the descriptive nature of my research design, I have focused on the first stages of the constant comparative method: open coding and axial coding. The major purpose of this study was to describe the process of video integration rather than to develop a substantive level theory. Thus, I did not conduct selective coding. Prior to this experience I had some limited experience analyzing qualitative data. I believe I even called it CCA. However, as it turns out I was creating predetermined organizational categories (Maxwell, 2005). Fearing the possibility of drifting to a familiar etic categorization, I wanted to make sure that I used as many original quotes as possible during the opening coding. I was hoping it would help me understand the phenomenon from the participants' perspectives rather than my own. According to Merriam (1998) I attempted emic analysis.

After I transcribed the interviews, I began to read through them several times. I found that, as described by Maxwell (2005), it was indeed helpful for me to listen to the interview tapes several times as I started to jot down some tentative categories and themes emerging from my data. I then went back and organized all transcripts in *Microsoft Word*. This allowed me to create a column to the right of the transcript for codes using participants' direct quotes. I was trying to leave as much context around as possible. In addition, I tried to open code as many meaningful chunks as possible to allow themes to emerge from the data (Glesne, 2006). In most cases it was much like rewriting the transcript. (Appendix B) It was a very tedious process, but I truly believe it allowed me to concentrate on what teachers were saying and not on what I wanted to hear.

After I came up with an extensive list of open codes, I transferred them to a new word document. I used the highlighting function of *Microsoft Word* to highlight open codes that fit under a category based on the content. Using the computer for that process allowed me to change the color or use multiple colors simultaneously without making a mess. I ended up using more than 15 colors to distinguish between different categories. (Appendix C) This process acted only

as a tool for data organization rather than data development.

Based on the description of CCA provided by Merriam (1998) I tried to compare particular incidents from my transcripts to incidents within and across data sets. I started to read meaningful chunks by color within one transcript and across others. After doing this several times, some tentative themes started to emerge. I began to make notes in the margins related to themes appearing from categories within and across transcripts. Some categories became my themes (e.g., video is not a panacea; it is just an alternative avenue). The coding process was augmented with memos (Emerson, Fretz, & Sha, 1995). I jotted down ideas that emerged as I was reading through transcripts which allowed me to construct categories or themes that captured some recurring pattern of emerging from the data. That seemed to be congruent with the generic qualitative research design as defined by Merriam.

I used matrices and concept maps to organize my findings. Maxwell (2005) defines concept maps as "a tool for developing the conceptual framework for your design" (p. 47). I really benefited from the visual display of my findings on the video integration process including its elements and the relationships among them. Matrices of quotes organized by thematic categories and a concept map of the video integration process can be found in Appendix D.

Although I transcribed and started to analyze my interviews as I completed them, I did not fully attend to the process until I had all of my data collected. I thought to myself, how hard it could be to analyze three short interviews. It was a lot harder than I thought! I was struggling with data analysis as I literally ran out of time. I feel like I never made it to axial coding although I claim I did it. I was confident with open coding and began to develop thematic categories. However, I felt like I could still find and test more relationships among categories (Merriam, 1998). According to Merriam, if I chose case study design, I would have different types of challenges trying to make sense out of it. I am anxious to try that!

From my view, the process of data analysis is when subjectivity bias can really take over. As we discussed in class, it is critical to look beyond one's focus especially when the data is obviously there. During open coding I was trying to use as many participants' direct quotes as possible to test my presumptions. I was proud to see some unexpected findings merge from my data that were based on emic analysis.

Quality and Ethics

This pilot study was a qualitative research exercise. I found it extremely challenging to avoid validity threats in the presence of time and resources constrains. I attempted to enhance validity of my study by providing verbatim transcripts and detailed descriptions, as well as by clarifying my presumptions about the study to the reader (Maxwell, 2005; Merriam, 1998). However, there are several other ways I could have assessed the validity of my study. I attempted to design my study so I would have artifacts to corroborate data emerged from interviews and thus, increase the trustworthiness of my study (Glesne, 2006). Unfortunately, due to the technical difficulties only one teacher was able to share her activities with me. In a future study I could try to find ways to collect data from a variety of sources in order to triangulate my findings as defined by Maxwell. I could have summarized findings from each interview as related to research questions and sent them to the participants for member checking (Maxwell). Unfortunately I did not have enough time for that.

While the quality of my study might have suffered because of aforementioned circumstances, I was very cautious of possible ethical threats. I believe research ethics regardless of research paradigm is the most important lesson I have learned in this class. As suggested by Merriam (1998), I was attuned to my participants' moods. I tried to be cautious, so my questions did not make my participants uncomfortable. Overall, I assured participants that I would be the only person with access to their data. I mentioned that after the interviews were transcribed I

would destroy their recordings. While it would be impossible to maintain their anonymity because I knew who my participants were, I promised them to keep their identity confidential in all reports based on this data. The obligation for maintaining confidentiality was also supported by the regulations and approval of HSRB.

Findings and Discussion

Several major themes related to the purpose and research questions of my study emerged from the data. They were: (1) video is not a panacea; it is just an alternative avenue; (2) video is an enhancement to instruction, not replacement; and (3) video for students with intellectual disabilities must be short, purposeful, understandable, as well as age and developmentally appropriate. Furthermore, I was able to create a concept map to depict the process of video integration into content areas with students with intellectual disabilities. Interview quotes included in this section were edited for grammar.

Overarching Themes

Video is not a panacea; it is just an alternative avenue. All participants noted the value of the visual component of video. Valerie summarized it by saying, “Picture is worth a thousand words” (line 235). However, it was clear that video is not for everyone. Some students may just have “more difficulty tuning into it,” while others may experience stronger feelings towards video, “hate it”, and “get upset” over it. Overall as Julie said, “The kids, who cannot attend, do not attend. They are in their own world” (lines 117-118).

All participants clearly stated that they do not see video as the only answer or a panacea. In fact Julie and Janice used exact same words to describe video as just “an alternative avenue” to provide students with access to information. It becomes obvious that video is not better or worse as any other tool. As a matter of fact, the effectiveness of video largely depends on each individual student. Julie said, “It [video] is not better than anything else. It just fits on the

continuum" (lines 179-180). "I like to try to get to my students through as many avenues as I can, because you never know what is going to affect one student as compared to another student. The more different avenues you have to reach a student the better off you are" (Janice, lines 127-129, 149). Valerie compared video to using Internet in the classroom as "it is the same thing. It is showing something before you teach it" (lines 193-195). It was an important finding for me as it came as a total surprise. Despite my passion for technology, I was able to distinguish this attitude by virtue of emic term "alternative avenues" I discovered in Julie's and Janice's interviews.

Video in enhancement of instruction, not replacement. This overarching theme was well represented across the participants. Valerie summarized it by saying that, "I think films enrich but do not become the teacher. They never are going to do that" (lines 393-395). Indeed, all teachers seem to share the perception of video integration as an add-on activity to a lesson plan regardless of the subject. It is apparent that teachers do not design instruction around the video but rather the other way around. According to Julie, "Video is like an add-on for things that are already developed. It works. It just enriches." (lines 343-344). "I would not necessarily adapt the lesson. I would probably adapt the video to fit the lesson that I am planning" (Janice, lines 229-230).

Even when using video as a relatively short supplementary activity, all three teachers warned about not overusing it. Just like any other classroom activity "kids are not going to sit and watch video so often" (Julie, lines 181-182). "I do not want to overuse it because the kids will loose their interest. Even academic video will loose its effectiveness if you used it too often" (Janice, lines 322-323, 354). All these themes allowed me to better understand teachers' perceptions of the process of video use. Using video as an enhancement of instruction suggests that teachers need something very easy to use that will allow them to quickly adapt a video and develop a supplementary activity.

Video must be short, purposeful, understandable, as well as age and developmentally appropriate. I thought I would never see recurring patterns in teachers' descriptions of essential characteristics of video for their students with intellectual disabilities. However, four characteristics appeared to be common among the participants. It becomes obvious that regardless of the grade level, teachers would like to see short, purposeful, understandable, as well as age and developmentally appropriate videos. This is very important information that is congruent with characteristics of students with intellectual disabilities. "These kids cannot take much information for that long, so they tire of it" (Julie, line 258-259). Valerie's main criterion for choosing videos was "so they would be able to understand it. If you are talking about things beyond their vocabulary, I tried to stay away from it. With this population it is important to ensure that "film has a purpose" (Valerie, lines 94-96, 395). Furthermore, "It is hard to find a video that hold their attention that is also age appropriate for a child in a high school aged body" (Janice, lines 103-105). It is interesting that age appropriateness seemed to be more important to Janice and Valerie, than to Julie. However, that may be explained by the fact that Julie currently teaches students in kindergarten and 1st grade, so she does not have a problem with videos being "too childish."

Process of Video Integration

Through this study I have learned how video can be incorporated into instruction in multiple ways. Teachers used video around teaching all sort of things from life and social skills to academic areas. As I was more interested in how teachers used video specifically for academic areas, I found that it can be used in all the areas: literacy (Julie), math (Janice), science (Valerie), and social studies (Janice and Valerie). The overarching theme was the introductory purpose of video. All participants used video to introduce the academic topic or to "launch instruction" (Julie, line 202). "I found before I taught a unit if I would just show a film … that would manage

students better" (Valerie, lines 31-32).

Every teacher stressed out the necessity to stop video at times to review the content. This finding is corroborated by the research on video use with students with high-incidence disabilities (Serafino & Cicchelli, 2003). The major difference is the length of the segment before discussion. While students with less severe learning disabilities can attend to longer video clips (Xin & Rieth, 2001), teachers in this study preferred to see shorter clips. "I might turn it off and discuss what we saw in the video and how it could be applied to their life" (Janice, lines 158-159).

Furthermore, I have learned that teachers supplement video clips with paper-based and hands-on activities. Those take place either during or right after the video clip. "I might make a little worksheet. Make it something interesting. Word search or fill out, crossword; something easy that they can handle" (Valerie, lines 294-297). "I use a lot of workbox type projects, so it would involve something that they saw in the video with a workbox or real life situation" (Janice, lines 163-167). In addition I learned that teachers use several picture-based software programs like Boardmaker, Writing with Symbols, and News-2-You. Concept map representing the process of video integration and all supporting quotes can be found in Appendix D.

It appears through this study that, despite the fact that video is just a supplementary activity; students with intellectual disabilities are really able to benefit from it. Video is "a hook" to get their attention. Overall, this pilot study provided me with some initial ideas on what elements a video enhancement program might include. I am considering, creating a tool for teachers to easily shorten the clip, as well as lighten up the narration and vocabulary used in it. After this pilot study I feel like teachers could benefit from a video enhancement toolkit program.

Reflection and Critique

In addition to the critique dispersed throughout the study; I will try to summarize some of

the thoughts I have in the aftermath of this study. Throughout this study I tried very hard to embody the nature of qualitative research and employ an inductive research strategy (Merriam, 1998). If I had a chance to start at the beginning and do the study all over again, I would have employed a descriptive case study design with several in-depth interviews and participants' observations to better understand the process of video integration. Now, that I am somewhat familiar with qualitative research, I believe descriptive case study design, as defined by Merriam (1998), would better correspond with the purpose and research questions of my study. I saw a lot of variability among my participants' experiences and perceptions. To address this issue, I could have narrowed the age group of students or extend the sampling until reaching a point of saturation or redundancy as described by Merriam. That is the point when no new information is gained. Despite variability, I truly believe that if I had a chance to interview more teachers, they would start to repeat themselves. It sounds cliché but qualitative is much more rigorous than I have ever expected. In some instances I found it to be more rigorous than quantitative studies. It was very surprising!

Upon completion of the pilot study, I learned the value of memo writing. I tried to write them but did not pay enough attention for this activity to be systematic. Maxwell (2005) advises to write regularly and systematically about research. If I did so, I would not have been as overwhelmed with the data analysis and report writing stages. I felt pretty comfortable with open coding. I felt strong about the data management system I employed. However, I really struggled with synthesizing and connecting themes emerging from my data. Ironically, I felt like I received some wonderful information that boosted the initial design of my software program. However, I struggled with presenting this information, so it would make sense to the readers. I think that the descriptive value of my study suffered from my tendency to be overcritical.

Obviously, qualitative research requires well-developed writing skills. This was difficult

for me. It is crucial to be concise yet very detailed. In addition, I was paranoid with the idea that people will rely only on the words that I choose to include. I realize you need to be able to write in quantitative research as well, however, I felt more pressure in this experience as there are no numbers for people to refer to in case the description is not perfect.

In the first chapter of her book, Glesne (2006) describes a student who had a difficult time with ambiguity of qualitative research complaining about the amount of new questions arisen from her study. I can confess that I share her feelings. I appreciate the experience of learning qualitative research. However, I still feel uncomfortable with the emergent nature of this type of research. I am not as tolerant of ambiguity as qualitative research requires, and the requirement of being sensitive to the context and variables sincerely makes me nervous (Merriam, 1998). I feel like my focus on details prevents me from seeing a big picture.

This was an extremely valuable exercise as it helped me to learn about the qualitative research process, conducting and analyzing interviews, as well as about myself. I found peace with the notion that there is no right or wrong way to conduct qualitative research. With that being said, I look forward to reading and learning more about this process, so I can do it WELL!

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