GIRLS DON'T DO WIRES: AN EXPLORATION OF ADOLESCENT GIRLS' MEDIA PRODUCTION

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Abstract

Girls make up 50 percent of all high school students in computer classes yet only account for 17 percent of the computer science placement test-takers (Kearney, 2006). Of those only 13% end up working in the U.S. as computer programmers (EKOS, 2004), part of a nexus of an established patriarchy that supports normative view of a male dominated media culture. This teacher-researcher study explores causes for the low percentage of high school girls continuing on to higher education and/or careers in media production through a qualitative analysis of thirteen high school girls and four boys, drawing in particular on data collected as part of a video production unit in several secondary classrooms. The study makes use of a cultural studies analytic framework that looks at the primary texts (the actual videos produced in the media class), the producer texts (through surveys, questionnaires, journals and interviews with the student producers), and the environmental text (where the videos are produced). An analysis of the films produced indicates a general aptitude in girls using new media to produce film, but an accompanying lack of interest in pursuing careers in media production. A second finding was that there were notable differences in the productions made by girls and boys and evidence indicates girls tended to tell their narrative via interviews, relying on others to tell their story, while the boys were more likely to use simple, plot-driven narratives, primarily meant to amuse. The interest of the girls in this genre suggests a need to focus more on reflexive interviewing practices in school in order to encourage girls in creating reflexive productions (as well as traditional narratives), and in so doing to support and strengthen interest in media production.

Résume

Les filles représentent 50 pour cent de tous les étudiants du secondaire dans les cours d'informatique; pourtant elles comptent pour seulement 17 pour cent des étudiants qui se présentent aux examens d'entrée à l'université en informatique (Kearney, 2006). Parmi celles-ci, seulement 13% travaillent aux États-Unis comme programmeurs (EKOS, 2004), faisant partie d'un réseau patriarcal établi qui soutient le point de vue normatif d'une culture masculine qui domine les médias.

Cette étude de professeur-chercheur cherche à déterminer les causes du faible pourcentage d'étudiantes du secondaire qui continuent leurs études vers des niveaux supérieurs ou qui se dirigent vers des carrières dans le domaine de la production de médias. Cette étude est faite au moyen d'une analyse qualitative de treize étudiantes et de six étudiants du secondaire, puisant en particulier dans des données recueillies dans des groupes de production de vidéos dans plusieurs salles de classes du secondaire. L'étude utilise un cadre analytique d'études culturelles qui regarde les textes de base (les vidéos réels produits dans la classe de médias), les textes du producteur (à l'aide de sondages, de questionnaires, de journaux et d'entrevues avec les producteurs étudiants), et du texte environnemental (où les vidéos sont produites). Une analyse des films produits montre une aptitude générale chez les filles à utiliser les nouveaux médias pour produire des films, mais en même temps montre un manque d'intérêt pour la poursuite d'une carrière dans la production de médias.

Une deuxième conclusion montre qu'il y a des différences marquantes entre les productions faites par des filles et celles faites par des garçons et il est clair que les filles ont tendance à exprimer leurs récits au moyen d'entrevues, en se servant des autres pour raconter leur histoire alors que les garçons ont plutôt tendance à faire leur récits en utilisant une intrigue simple et qui cherche à amuser. L'intérêt montré par les étudiantes pour ce genre laisse supposer un besoin de mettre l'accent dans les écoles secondaires sur des méthodes d'entrevues introspectives de façon à encourager les étudiantes à créer des productions introspectives (aussi bien que des récits traditionnels), ce qui contribue à appuyer et à renforcer un intérêt dans la production de medias.

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The students I have learned so much from over the course of this study and the course of my twenty-two years of teaching;

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Dedication

To my wife Clare who had to put up with my two year affair with “Thesora”;

My son Joshua who acted as a sounding board and helped transcribe my interviews;

My son Ethan who drew the cover image and kept reminding me that I was supposed to be having fun;

and finally, to all the girls who speak the grammar of film.

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CHAPTER I: Introduction to the Study and the Autobiography of a Question

In an English high school in a suburb of Montreal, a fifteen- year- old girl asks me if she can film her argument instead of presenting it to the class. I reluctantly concede, only to be pleasantly surprised by the final product: the student, who normally struggles with written assignments, manages to use the codes and conventions of film to create a powerful message. She was too shy to present in front of the class, but having me watch the film removes the pressure. It is her most persuasive work that year. Upon reflection, I began to realize that she is not alone: year after year, girls find their voices through media in the classroom, lead in the production of school yearbooks, and make up the majority of samples that represent the school on an international level.

The school where I teach is an international school, and in order to graduate from the International Baccalaureate Organization (IBO) program in technology, students must plan, design, create, and critique two major works demonstrating the cumulative knowledge of technology they have accumulated during their five years in high school (from grade seven to grade eleven). Since the school no longer has a technology department outside the computer program, the tasks must come in the form of various media production, including films, web sites, and PowerPoint presentations. An essential component of the IBO program is external moderation: for moderation/assessment purposes, the school must send eight samples of students' work for confirmation that they are being challenged at a level expected in "their final year of an IBO Technology programme." Print media are deemed "below the level of a student in their final year of an IBO Technology program," so films or websites are the only viable options for samples given the programs available at the school.

The IBO insists that the samples provide two "above average" works, four "average" and two "below average" student works. These samples must be submitted at the end of each year, and are sent to Cardiff, Wales for moderation. The samples are then reviewed and a detailed report follows, rating the school's implementation of the IBO program, so the samples must be of good quality. Incomplete samples are not rated as "below average" but rather as NM (Not Moderated) and therefore are not accepted. All students must complete all stages (criteria) or their samples will not be accepted.

Over eight years (2000 – 2007) my attempts to send an equal number of boys' and girls' samples divided (four of each) were hampered by the simple fact that 85% of the "average" and 90% of the "above average" samples were the work of girls, while the boys' work was often incomplete and/or mediocre. As the technology program at the school expanded, other teachers who participated in teaching media production made similar observations: – girls excel at high school media production and make up a disproportionate number of the above- average students in the technology program, year after year after year.

Intriguingly, it is the boys who ask for letters of reference to enter college programs in Information and Communication Technology (ICT) and film. Until recently, none of the girls from my classed consider entering the field of ICT or media production. Instead they vied for positions in to more traditional "female" paths fields such as Social Studies, English, and more encouragingly, pre-med science programs. This recurrent phenomenon of girls and the choosing not to continue in media/ICT raises the question: why don't girls "do" wires?

Objectives of the study

This work attempts to shed light on the phenomenon of girls' (and later women's) under-representation in media production beyond High School. To date, there are very few studies focusing on girls' media production in high school and forms it may take as a way in to studying this phenomenon. This study also attempts to substantiate or refute some of the existing notions of gendered digital differences in the high school setting. Some work has been done at the college/university level, a space where girls and young women are already under-represented (see Chapter II). However the data seems to indicate that, in spite of excelling at media production in high school, girls often fail to recognize the creation of new media as a potential career path. When they do pursue careers in ICT, they are often thwarted in their efforts and leave the programs early (Sanders, 1997, 2002; Margolis et al, 2002; Margolis, 2002). In her work on female university students entering ICT programs, Sanders discovered that although an equal number of male and female students owned and used computers, women students actually outperformed male students "by academic measures such as grades, but the women attributed superior skills to male students" (Sanders, 2002; p. 106). Her work further uncovered that, at least at the University of New York, "44 percent of the women switched to majors away from computer science as compared to 29 percent of the men" (Margolis, Fisher and Miller, 2002).

Some studies are addressing the question specific to ICT and girls, and one answer is found in the video games children play. Research on the effect of gaming on the gender dynamics of ICT is making headway: Martinson (2006) points out that one of the best ways to learn is to tinker, and to play with the various software applications, and that boys are much more likely to do so and then to go into computer science and media production courses. She

cites several studies that point to the "vicious cycle" of fewer girls being interested in games, which means there are fewer girls working in technology and fewer girls developing computer games. This becomes an insidious cycle - the same cycle that exists in relation to all forms of media production (gaming is merely one of many and the lines blur, especially in this age of convergence where games such as *Doom*, the *Laura Croft* series, *Final Fantasy* and so on are routinely turned into films). Martinson (2006) points to the need for more research in this field and speaks of some of the work being done by specific organizations to correct this imbalance.

I find myself a "modest witness" (my apologies to Donna Haraway) to this phenomenon, and have been drawn into a situation I previously knew nothing about: girls' self-perceptions and their notions of media production. How can these girls show so much promise in a subject and then just turn their back on it? I have handed top student awards to girls in my computer class year after year, and have complimented them both publicly and privately. However they take the compliments and the awards and go off to study in some other field.[1] What is going on?

It has become a personal quest to study this phenomenon with the aim of: 1) understanding why girls seem to do so much better than boys in media production; 2) understanding why, even after being told they are good at something, girls decide not to pursue it; 3) finding out whether it is a girl's **choice** not to enter the field, or whether she has just never given it serious thought, and if so why not. I am basically attempting to discover the gendered roots of the media production imbalance (in the style of a classic gender/media study) simply by looking in the classroom and studying the girls and why they "don't do wires".

While it is beyond the scope of this study to address in any definitive way the broad issues of gender and media production, I do attempt to explore possible reasons for the disparity

[1] I am pleased to report that during the course of this study, one of the graduating students informed me she was going into a web page design program in college.

in the performances of girls and boys by observing "up close" media production at the point when girls are successful. Other questions I look at include the following. How do girls produce media and what techniques might aid them in developing their skills? How do girls perceive media production as a field of study? How do girls feel about their own competence as media producers? To what extent does the physicality and materiality of digital technology (e.g., wires, sharp metal objects and/or working with electricity) influence girls' interests?

These questions are broad and frame more specific areas of concern. What are girls' attitudes towards gender and media production? What myths and/or stereotypes might be affecting girls' choices? Can the myths that deter girls from entering the field of media be dispelled? What choices girls make in their media production projects might indicate their need for support?

The specific goals of this research are as follows: First, it sets out to expand existing research on the topic by offering a snapshot of the beliefs held by teenage girls concerning the role of women in media, and to capture and interpret their understanding of media production and their potential role in it. Second, it has the goal of understanding the impact these perceptions might have on young girls. Third, it seeks to analyze the nature of girls' media production in order to obtain a better understanding of their practices and finally. Finally, as a facilitator of the Quebec Education Program (QEP) approach to media production[2] I am anxious to see how media production fits into gendered patterns in literacy: how does girls' performance in media production compare to their performances in other forms of literacy and do girls demonstrate the same advantage over boys found in other aspects of traditional print literacy.

[2] This approach includes: identifying aspects of representation and exclusion in media texts; identifying the characteristics of a target audience; and discussing the impact of media texts on a person's sense of self. The QEP expects students to "use a variety of strategies for a planned effect, produce a media text that meets the intended purpose following the conventions of media productions to target the intended audience, justify decisions about media texts produced, revise their own productions to better communicate message." (Quebec, 2006a; p.19)

The Study

Like the work of Mary Celeste Kearney, Geraldine Bloustien and others, this study attempts to expand scholarship on media production, specifically in relation to how girls produce media. This study attempts to situate itself among studies of girls and film-making by Kearney (2006), Bloustien (2003), Hackman (2005), and Molestane, Mitchell, Smith, and Chisholm (2008), and is modeled on studies of girls' web design as seen in the work of Kearney (2006), Weber and Dixon (2007), and girls' digital "bedroom culture" as described by Mitchell and Reid-Walsh (2002). The reason I see this study as an extension of the phenomenon of "bedroom culture" is because the films created in it might be read as a form of "hallway culture" whereby the girls created a new art form by sharing their private spaces in the films they produce in the halls at school. These films transcend the public/private sphere allowing educators insights into aspects of students lives not easily entered.

School has always been seen as a "public" space, but in fact there are "private" spaces within that public space and it is interesting to see tweens and teens empowered by telling their stories. This study allows for the creation of a new space where the public and the private coexist and the students can create new productive components such as films and websites in the same vein as bedroom culture. It also opens the way for further study into "hallway culture", which, though alluded to by some (Jacobs, 2007) and discussed at the elementary school level (Ratcliff, 1995), could be used both as a motivation for students to create productions and, as a way for teachers to tap into a culture that eludes them, despite being so close.

The study itself is an ethnographic investigation into how girls make media in order to discern possible patterns in methods of production, and insights into and attitudes towards media

production as a field of interest. Using information gathered through interviews and observation of thirteen girls and four boys from a high school in suburban Montreal, I studied girls' reactions to a curriculum based on the media competency component of the Quebec Education Program's (QEP), as well as the various stages they go through in order to create their video productions.

This population was chosen because of my interest in discovering the roots of the phenomenon mentioned earlier: why don't girls pursue careers in media production in spite of demonstrating competency in the field? I have been working with this population for more than ten years and have been consistently impressed by their productions despite faulty equipment, antiquated hardware, and students' general lack of prior knowledge of media production. In an initial survey with these students, I asked about their access to computers, time spent on computers (types of activities and duration), prior media production experience, and general interest in the field, and as well their interest in pursuing media production as a career. I also asked them to rate their perceived computer competency because over ten years I observed a negative correlation between perceived ability and grades: students who perceived their abilities as "very good" to "excellent" generally did less well in the course than those who rated themselves lower. Through this study I realized these perceptions were gendered and it was the girls who routinely rated themselves lower in ability[3] while outperforming the boys.

During interviews, I asked students their ages, about their prior experiences with media production,[4] their future aspirations, and gave them a chance to discuss their production processes and choices. The final aspect of this study includes a formal analysis of the students' works including aesthetic and structural components.

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[3] My findings support the work of Holloway and Valentine (2003) as well as Margolis, Fisher and Miller (1998).

[4] Students demonstrated little prior knowledge on which to build, a common finding in research of high school media production (Masterman, 1989; Buckingham, 1992; Kearney, 2006), stressing the importance of teaching media in the classroom.

Situating myself in the Study

My teaching

I have been a teacher for 25 years and a researcher for about the same time. I have taught everything from pre-K to university, students ranging from autistic to incarcerated, and every age from two to seventy-two. I truly love what I do. I first became aware of women's issues in education when I was hired to train a group of women ranging in age from 23 to 63 to teach "office technology." Here were a group of unemployed women who had worked until they found themselves made redundant by the introduction of digital technology in the workplace. These women were suddenly thrust into this program set up to retrain them in "new technology." I saw this as a great injustice - these "disposable women" found themselves outdated, some with only a few years left in their working careers. I found ways to help them learn this new technology and watched their sense of empowerment grow as they conquered this new terrain. I was hooked.

After a few more years of working with adults, I found myself teaching teen-agers digital technology, and found they didn't have a taste for learning how to master the applications in the Microsoft Office Suite. Since this was an IBO school, such applications were considered "below the level expected of an IBO middle-year student" so I had to up the ante. The IB curriculum was new to the school and my first year teaching the IBO technology program was the first year for many of the students in the IB program, so we experimented, struggled and failed together to meet the IBO requirements for Technology until we discovered that the IBO did deem media production acceptable, and the students seemed to like producing media, so a new curriculum was developed.

I experimented with and strove to improve the curriculum, all the while continuing my studies in education, wondering how I could mesh the theory with the practice. I discovered various forms of action research and at times worked with my students to create a curriculum acceptable to the IB program, all the while aware that I was lucky to be in this living lab, with mostly eager student-teachers to help me along the way.

Having conquered the IBO Technology curriculum, I became intrigued by the gender-based-phenomenon described at the beginning of this chapter. As noted above, it was repeated year after year and I was totally frustrated, feeling that I was failing as a teacher, being unable to motivate the boys to produce at the same level as the girls. Was I affecting the outcome? Was I different with the girls in my teaching, my attitude, my demeanour? There were occasionally boys who would shine, and girls who would fail, and at times there were those classes that seemed to be "just right," with a gender-neutral grade distribution, but the girls consistently handed in their work on time, wrote journals that went beyond the "narrative descriptive" (an IBO moderation term), and submitted media productions that were technically more competent and generally more interesting and fun to watch. It was time to look for answers, and if not, better questions.

My research

I realize I am a built-in confound variable, being both a researcher and teacher. I justify my practices by imagining my work as a form of "first-person shooter" action research where I design a study to view a problem and enter a world of active moment-to- moment theorizing, which allows me to develop interesting perspectives on the problem - perspectives which I

selfishly intend to integrate next year when teaching the same courses again. Of course this is not traditional action research since I have not discussed the working with others in teams, nor have I worked as part of a "community of practice" to improve the way the students address issues and solve problems, but I did feel that I was working with my students to create a better curriculum, and they came through for me by demonstrating that when you give them the tools and let them go, girls make some pretty interesting films in a very unique manner.

I want to clarify that though I worked with my students, this was not meant to be "collaborative" or "participatory" research as described by Chin (2007), who advocates teaching children about anthropology, but I did, I believe, give them agency and I did put them in charge of filming their lives which "allowed them to integrate skills that are usually treated (and tested) in the classroom" (Chin, 2007: p. 279). When they began to ask me whether they could interview teachers and other students, I gave them free reign to choose questions bearing in mind Chin's observation that "children's questions for suggestions to consider, become a sort of data even as they are instruments for collecting information" (p. 279). The students' questions to each other provided insights both into their lives in high school and what was important to them.

I entered the Zone of Proximal Development (ZPD) with my students, but as film makers rather than anthropologists and I studied their abilities in this sense.[5] Teachers entering the ZPD with students must use various tools to assess what they are doing, as well as bring them to a state of consciousness (meta-cognition or "knowing what you know"), which according to Vygotsky is the moment that learning takes place. This was achieved through their journals and informal interviews, but my focus was consistently on their film making process and not just the

[5] One of the advantages to grounded theory is the ability to look at what transpires rather than validating what you expect to transpire. In this case, what transpired (the discovery of "hallway culture" and a different perspective on school life) was so significant it could lead to a separate study in of itself, one that goes beyond the scope of this thesis.

content of their films. This was useful, but a treasure trove of data was lost when the year came to an end and all the girls' attention shifted exclusively to the prom and graduation ceremonies.

My research, though based in grounded theory, often looked like a variation on Participatory Action Research as outlined by Paulo Freire, where I became the teacher-student, a teacher who learns from his students who don't really intend to teach. There is a deep reciprocity between my students and myself: I attempt to empower them by giving them a new way to tell their stories, and they tell me how to best to teach them how to tell their stories - a continuous loop which I hope to refine for the rest of my career. My students gave me insights into their lives which I never intended or expected to see, and I was both pleasantly surprised and ashamed of my own under-estimation of their abilities.

Having gone through an educational system as a male, I came to accept the scientific model (quantitative data collection as the only way to find truth), but while I was writing my master's thesis in Child Studies, I came up against one of the conundrums of quantitative research, namely that the design dictates the question. I was lucky enough to eventually meet up with Sandra Weber at Concordia University who pointed me in a different direction and, with time, I found that qualitative research and reflexivity could make sense of things in a way that statistics could not. Reflexivity is a major theme in this work and I have been turned inside out trying to situate myself.

Potential Benefits of the Study

The value of this research lies in understanding why high-school girls pursuing higher education generally do not look at "new media" production as a viable career path. Research into

the gender-based digital divide in media production is relatively new, and little attention is paid to the why of the fact that so much many of the producers in most forms of new media are disproportionably male. Researchers in the U.S. who have studied the issue have found a computing world that is "both institutionally and symbolically patriarchal and masculinist" (Kearney, 2006). My work seeks to discover the root causes of these misconceptions and to discover how best to dispel these beliefs in teen-age girls. Given Johnson's (2006) "co-creation" theory which explains that gender affects technology and technology affects gender, it may be possible to undermine male hegemony by changing perceptions of what is male and female in relation to media production. Technology does not have to be deterministic and, just as the Internet was transformed by users, digital technology can even out all aspects of new media production and can be used to challenge the patriarchal status quo.

If the myth of media production as a "male" domain is challenged at the high school level (or in lower grades), might it be possible to reverse this trend and allow girls to move towards fulfilling their potential in these previously "masculinist" careers? The potential benefits go beyond simply evening out the numbers in these fields: many researchers focus on the misrepresentation of women in film and TV (Smith and Cooke, 2008; Gills, 2007). Might a new generation of women change the representations of women in media? If women are to assume positions of power and leadership and be to be accepted, then the role models they create will undoubtedly be very different from the current "eye-candy" model designed to please the 18-35 male demographic, which perpetuates sexist stereotypes.

Furthermore, a study of this type can lead to findings on how girls might handle media production differently than boys, considering that teaching of technology tends to favour boys (Shroyer, Backe and Powell, 1995; Sanders, 2005, 2004, 2003; Seymour and Hewitt, 1997; Kay

2007). It is essential that this unfair advantage given to boys be rectified, especially in Quebec, where an educational reform (of which ICT and media production are a vital component) is being implemented.

The role of media in the QEP reform and how it might be used to benefit girls

My aim in this section is to situate media production in the Quebec school system, explain the aims of reform in relation to media, and demonstrate how this reform could lead to a generation of young women entering the workforce with the same experience in media production as boys. This reform offers the opportunity to break from the notion of ICT as a male domain: girls will have the opportunity to play with the same toys as boys for communicative purposes, unhindered by self-defeating notions in relation to media production.

> "Although schools and the different media are rivals in many respects, the school has a major role in familiarizing students with the functions of the various media, enabling them to master the different modes of communication employed in the various media, helping them develop the critical judgment necessary to take full advantage of the possibilities offered by the different media and enabling them to recognize their potential effects (Gouvernement du Québec, 2003; p.31).

The importance of teaching media production in schools is being addressed in educational reform initiatives in Quebec (Gouvernement du Québec, 2003, 2005, 2006) and Ontario (Duncan et al, 1989; Pungente, 2007). Media already plays an important role in

education in England (Buckingham and Sefton-Greene, 2005) and Australia (Luke, 2005; McMahon and Quin, 2008), and is a useful tool in empowering girls in Southern Africa (Molestane et al,2008). Governments recognize that a command of media control equates power (Luke, 2005; QEP, 2003) and in the current information age, those who have control over the means of producing information hold all the "possibilities offered," and their "potential effects" (Marx, 1887). In other word, those who can use the tools, wield the power.

The connection between technology and gender equality is almost self-evident: the proliferation of digital programs on the market enables children to create high-quality productions at a reasonable cost with minimal training. Physical strength is no longer at issue since girls and boys are equally capable of creating media using small, light, hand-held cameras, editing film and creating websites using drag-and-drop programs.

In Quebec, ICT is no longer taught as a vocation, but rather as part of a curriculum that includes a new approach to literacy. This is not unique to Quebec: "given the current drift toward media convergence, it is my contention that media studies, cultural studies, computer and technology studies can no longer be taught independently of each other" (Luke, 2005; p. 132). Taking this trend into consideration, the QEP has made media one of four competencies in English Language Arts Cycle One (talk, reading, writing, and media):

> "language programs lend themselves particularly well to the development of students' ability to produce media documents and to understand the way the various media work, the ways they are used and how to evaluate their effects" (Gouvernement du Québec, 2004).

Language Arts is a field in which girls have always excelled (Statistics Canada, 2007), and stressing the communication aspect of ICT is a cornerstone for girls' success (Holloway and Valentine, 2003). In the scales used to assess students' media production, group work and communication are essential components of the curriculum:

> "Media texts are produced collaboratively with peers, by means of which students gain insights into the codes and talk and collaboration are essential components of this competency" (Gouvernement du Québec, 2006: p. 18).

The digital divide redefined

A critical aspect of the digital divide is the speed at which patterns of use and consumption of media changes. I began this study several years ago, so there may be less difference between girls' and boys' use of technology, but there seems to remain a difference in *perception* of ability and a *sense* of belonging in the field of media production. There has been much discussion of the "digital divide" between rich and poor over the years (Statistics Canada, 2005; Bickner, 2007; Gordon and Gordon, 2003; Wilhelm, 2003), and of course in relation to developed/developing countries (National Telecommunications and Information Administration [NITA], 2000), but a continuing digital divide is the one between men and women (Reid-Walsh and Mitchell, 2004), particularly in relation to media production. The under-representation of women in ICT and media is well documented (Kearney, 2006; Lauzen, 2005; Holzschlag, 2007; Deuze, 2006), but what flies in the face of this under-representation of women is the passion with which girls embrace media production at the high school level. Perhaps the biggest divide then, is between what girls *can* do and what they *choose* to do.

Although gender-based research suggests that females prefer design-oriented activities while males prefer learning experiences that involve using technological tools (Weber and Cluster, 2005), there exists a growing body of evidence that suggests girls equally enjoy using computers to create media productions in high school, and are adept at both in the design and utilization of ICT technology (Sanders, 1997, 2002). At the same time, there remains a great disparity between girls' achievement in media production in high school and their interest in pursuing a career.

Many problems have been created by the rush to prepare our children for the digital age, and some can only be noticed at the ground level, in the classrooms (Cuban, 2003). An interesting manifestation of the second "digital divide" is in the productions of students themselves, but this is not one that has received much attention. As mentioned earlier, there has been much written by feminist scholars (to be discussed at length in the next chapter) on the misrepresentation of women in media, the under-representation of women in media production, and on girls' media productions, but there seems to be a paucity of studies that ask the girls why they are not interested in pursuing something that they are obviously good at. Margolis ( ) is studying this problem at a tertiary level (why girls leave the field of computers in university), but there seems to be a lack of serious study of what happens in high school.

Definition of Terms

In this study, "media" refers to various means of communication: according to the Merriam-Webster on-line dictionary, a medium is defined as "a means of effecting or conveying something." There has been a great deal of confusion caused by the 'media-hyphen' and

'hyphen-literacy' debates, well documented by Fedorov (1999) and Buckingham (2003), a Babel of terms including: "Media-education," "Educational-literacy", Media-studies", "Screen-literacy", "television-literacy", "film-literacy," "visual-literacy," "information-literacy" (Leinonen, 2006), and most recently "new-literacies". Usually media specific, the only major difference is that some of these approaches advocate merely analyzing media (Masterman, 1985) while others encourage creating media as well as analyzing it (Buckingham, 1995, 1998; Kinchloe, 1997).

When the term "media" is used in this work, it is used as a plural of a medium, not the more popularized term that equated media to "the media" or "mass media" while the term "media literacy" assumes the deconstruction and production of ALL forms of media literacy: mass media, all forms of media, media production and all connected industries. This work supports the definition of the teaching of media offered by Renee Hobbs (2008) in the U.S. as well as Carmen and Allen Luke (2005) from Australia. These authors advocate an approach where all "hyphens" combine to create a single, cohesive model. Carmen Luke (2005) points out that technology has permitted for the convergence of most media onto the screen of a laptop.

"New Media" is a term coined by Lister et al. (2003) that acknowledges convergence of media forms beyond production to include the institutions involved as well as the culture surrounding those institutions, characterized by a shift from modernity to post-modernity, globalization, the "post-industrial" information age, and a de-centering of established geo-political order. Lister also coined the term "prosumers" (Lister et al., 2003) to characterize the blurring of spaces between producers and consumers with the advent of drag and drop production, blogs, etc.[6]

[6] Not mentioned by Lister but also prime examples of prosumers would be fan sites, and fan films, discussed at length by Jenkins (2006).

"Media production" refers to all possible manifestations of "screen" production where the final product is created with the intention of being seen on a screen rather than a print version. Although a word processing document can be seen on a screen, it is meant to be viewed in a printed, analogue form. Conversely, although one might print a web site, doing so greatly reduces the power of the medium, especially in relation to its use of hyperlinks. Media production and ICT are placed in close proximity due to the fact that media convergence makes differentiation between the two less and less justifiable. (Jenkins, 2006)

"Mediature" (media + culture) is a term that unifies various phenomena observed by researchers (Rushkoff, 1999; Eagly and Karau, 2002) whereby mass media seeks out (and/or sometimes invents) an image of society which it in turn portrays via the televisual. This image is emulated by consumers, fed back to the media, but in the process creates a new culture, one outside of media control. Mediature does not view technology as deterministic but rather takes into account that people adapt technology beyond its intended purpose and consumers play an active role in its production, often oblivious to the entire process taking place.

Mediature goes beyond the notion of "Normative Reflexivity" found in Bourdieu (1993) and Johansson (2007) that portrays the media's effect on society as deterministic: "we learn how we should think and behave via the media" (Johansson, 2007; p 119). The notion of mediature is based upon an interactive model, acknowledging that people feed back into these norms as outlined by Rushkoff's notion that the audience actively contributes to this process. This term also entails the nature of the existing digital hegemony that contributes to and strengthens gender biases, reinforcing and perpetuating stereotypes as discussed by Johnson (2006).

Mediature is related to "Normative Reflexivity," a term coined by Pierre Bourdieu that has been discussed at length by others, including Johansson (2007) who uses it in his explanation

of media and self formation and how media affects gender roles and expectations. The phenomenon of mediature is also discussed (but not labelled as such) by Gray (2005) who claims that media production, "is a large part of human experience," citing Bandura's notion that conceptions of reality are greatly influenced by what "is heard, read, and seen." Bandura (2002) notes that the vast expansion of video and other forms of media technology have added to models for society and that "new ideas, values, behaviour patterns, and social practices are now being rapidly diffused by symbolic modeling worldwide" (p. 77). The prime difference between mediature and "Normative Reflexivity" is that Bourdieu's term assumes technological determinism while mediature assumes give and take between media and culture, making the process flexible and subject to change through the use of media by "prosumers."

"Reflexivity" is also a key theme in this study and is seen in many incarnations; it is a term found in many disciplines and as Bourdieu (1993) points out, has many different manifestations. For the sake of simplicity, I will be referring to three of the four styles of reflexivity as listed in Finlay and Gough (2003): 1) self critique and personal quest (the girl's films and my own work); 2) objective reflexivity as a methodological tool; and 3) Feminist experiential reflexivity as the practice of positioning since this research is qualitative in its approach involving semi-structured interviews, informal interviews (including adults with a history of media production not from the school) mixed with a life-history approach.

Thesis Organization

This first chapter has introduced the phenomenon under study, that being that although girls do well in ICT and media production in high school, they are underrepresented in the field of media. Fundamental questions that directed me are introduced and key terms are defined. Chapter Two is an overview of research on the underrepresentation of women in media production, followed by (a) a discussion of possible reasons for the lack of women in media production, and (b) an overview of research into girls as media producers. Chapter Three discusses methodology and design including the use of Grounded Theory as a method of research and the collection process. Chapter Four discusses the environment as a text, its effects on the study and the students' films. In Chapter Five, the study of production texts is divided into two parts; the first section gives a discussion of the training and focuses on the differences found between sexes when creating film. It also includes a discussion of the younger students' films leading to the second section, an analysis of the senior students' films through a reflexive lens. Chapter Six outlines the analysis of the producer texts and is divided into three sections: the surveys, the student interviews, and finally their journals, where the discovery of a general disinterest in computing by the girls is explored. The final chapter (Seven) summarizes the findings and suggests possible applications for this research, and potential directions for further research.

CHAPTER II: Review of the Literature

> "The reasons for gender disparity are complex and deserve closer analysis, particularly if strategies are to be developed that can correct this imbalance."
> (Mary Celeste Kearney, *Girls Make Media*: p. 244)

This chapter reviews the complex nexus that affects girls and/in media production with an overview of the existing condition of gendered disparity in all levels of education as well as the coexisting disparity found in employment in the field of media production. I will also explore how this disparity is perpetuated by male media producers, creating a cycle that ensures male dominance in the realm of media production through mediature. This chapter is divided into two main sections. In the first section, I look at the literature that deals with women's participation in the media, the possible roots of this lack of participation, and representations of women presented in the media, including evidence related to media representations of women as media producers. In so doing I attempt to situate the need for a greater focus on understanding work on girls as media producers. In the second section of this chapter, I turn to the literature on girls as media producers in order to examine the roots of resistance. I examine three main areas: girls and media production broadly, girls and online production, and finally, girls and video/film production.

A New Problem without a Name

> "So here I am a couple years back. I'm watching these shows and movies with my daughter, and I'm counting on my fingers the number of male characters and female characters, and I soon run out of fingers on my left hand. And I decide I'd like to do something about this, because I really feel like people aren't aware and it's not being addressed. . . . And the results were stunning. In fact, three out of four characters in G-rated movies are male. We studied the top 100 movies released from 1990 to 2005. Of characters shown in groups, only 17% were female. And of the few female characters that were in these movies, most of them were highly stereotyped. And, by the way, during this fifteen-year period, there was zero improvement, as far as the percentage of female characters. So you have to think, what message is our culture still sending to kids? (Geena Davis, Speaking at the National Conference for Media Reform, 2007).

What Geena Davis observed is a symptom of digital patriarchy, a society where media production serves hegemony. More specifically, those who produce media dictate how women and their role in society are depicted, perceived, and replicated. Men routinely hold positions of power in media production and the reality they create shapes the normative expectations of consumers, perpetuating an insidious cycle of gender distortion, one where women do not see themselves as potential controllers of media, only consumers. This new "problem without a name" exists in a reality dictated by the media, patriarchy so firmly entrenched in and around media that most women don't even consider what they are viewing is out of the usual.[7]

[7] Prior to the study, when I discussed this phenomenon in high school computer classes, most girls had not noticed and they seemed perplexed or really did not find it very important.

Studies of gender representation in media production in Canada demonstrate the typical symptoms of a patriarchal industry: although women dominate the *clerical* field in screen industry (85%), they account for just under 10% of directors belonging to the Directors Guild of Canada, 15% of film and video camera operators, 22% of film and television production audio and video recording technicians, 4% of grip lighting positions, and make up only 13% of computer programmers working in new media (EKOS, 2004). As well, women only represent 24.9% of the Canadian ICT labour force (ICTC, 2007) and in an age of convergence, ICT is the basis for many aspects of media production.

In the U.S., things are worse: of the top 100 movies of 2005-2008, only 2-5% were directed by women (ImbD, 2009) down from 7% in 2000 (Lauzen, 2005). Women comprised a mere 2% of cinematographers, 13% writers, and 17% of all executive producers. (Lauzen, 2005). In the U.S., women receive less than 28 percent of the bachelor's degrees awarded in computer science and make up only 20 percent of the workforce in the field. (American Association of University Women Educational Foundation, 2000). In the dawning of the digital information age, an old shadow looms over this new day: women are once more being left behind, victims of a new "digital divide," one based on gender.

This trend of women's apparent under-representation in media production is not unique to North America. Indeed, as disturbing as these trends are, Canada and the U.S. fare better than elsewhere in the world. According to the United Nations Development Programme – Asia-Pacific Development Information Programme (UNDP-APDIP, 2007) in most countries women are noticeably lacking from ICT and media production. This trend continues in all facets of media production, and begs the question: when it comes to media, why don't more women produce?

Participating in media production is essential for women to challenge the existing patriarchal structure, for we live in a media-culture, a mediature, where life imitates art and art imitates life in an endless loop depicted in Douglas Rushkoff's *Merchants of Cool* (1999): mass media seeks out an image of society which it in turn portrays as an image of society and culture, a notion akin to Pierre Bourdieu's (1993) notion of "Normative Reflexivity." We live and learn our behaviour through the media (Johansson, 2007) and find gender relations and expectations through our negotiations with media representations. These images are emulated by the media consuming population, and then fed back through the media to society, creating culture, validating the media's initial claims that these images represents society's values and mores.[8] Those who produce media control culture: they actively participate in forming society. Without addressing the issue of the misrepresentation of women, we cannot dispel stereotypes and misperceptions of future generations.

It seems logical that to break this loop, women must be contributing equally to the image that helps shape culture, lest another generation goes by where women exist at the periphery of power, trapped beneath a light emitting diode (LED) ceiling. There are separate but interrelated issues that must be confronted: first, men as controlling production (which must be challenged), that leads to the distorted representations of women in media as portrayed by Geena Davis. One feature of these distorted representations is especially insidious: representations of women that *specifically* perpetuate the myth that women are not and cannot be part of the production process. It is essential that women be part of any process that provides a normative reflexivity where women find models of values and mores. As is the case in most forms of hegemony, the

[8] In this age of "reality TV", this process is accelerated because viewers no longer perceive these roles as being fictionalized and yet the majority of reality TV shows are produced and directed by men and continue to portray women in stereotypical ways i.e. marriage as a "reward," women as eye-candy, women as "bitches", etc.

institutes associated with media perpetuate existing hierarchies; the "old boy's network", as Mary Celeste Kearney (2006) puts it, is found in many institutions.

Media production reinforces traditional gender patterns in a variety of ways and one of the most damaging is the depiction of male dominance of the field. Female expeditions into media production are stymied by a belief that girls/women are not producers of media (in the media industry), even though it is not uncommon for girls to produce media in high school (Kearney, 2006) or on their own (Jenkins, 2006). What remains odd is that women seldom pursue (or at least remain in) careers in media production. This is a pattern that according to many researchers has been developing for some time and shows no sign of changing directions:

- U.S. girls compromise 50 percent of students in high school computer classes but account for only17 percent of the computer science advanced placement test-takers (Kearney, 2006);

- In Britain, 42% of all girls in high school take ICT GCSE, but by A-level the numbers have dropped to 29% (4,430, compared with 10,500 boys) and just 33% of those girls (1462) take up modern technology apprenticeships (Haughton, 2002);

- Although women outnumbered men in Canadian universities in general (61%), the number of women entering ICT at the university level has *declined* by 18.2% in the past ten years (Statistics Canada, 2008);

- Of the top five U.S. schools for film training, women made up only 36 percent of all incoming students (Kearney, 2006);

- Of the 491 active members on the W3C HTML Working Group, the group that maintains and produces incremental revisions to the specifications (html, xhtml, PHP, etc.) used for creating web sites, just 15 are women. (Holzschlag, 2007);

- Females accounted for only 11.5% of workers in the Game Development Industry (Deuze, 2006);

- Women comprised only 20% of all TV creators, executive producers, producers, directors, writers, editors, and directors of photography working on situation comedies, dramas, and reality TV airing on U.S. broadcast networks during the 2005-06 season, representing a *decrease* of one percentage point from the 2004-2005 season (Lauzen, 2006).

It appears that men make still make up the majority of those going into higher levels of education in media production, ensuring male dominance of the field and thus control of most forms of media production. Although it is difficult to identify a clear cause and effect relationship between the two, it would seem that this phenomenon is likely to contribute to the perpetuation of existing stereotypes in the form of caricatures about women found in most forms of media. Media images of women marginalize women, but more confounding are the images that portray a reality where women "don't do wires": the images of males as the only ones fit to be media producers must be challenged. Some of the worst damage perpetuated by existing media productions is the myth that women cannot be successful in becoming media producers, part of the process of keeping women out of media spaces: "Media portrayals of women may

contribute to and reinforce these biases against women, making it more difficult for women to assume positions of power and leadership and be accepted" (Eagly and Karau, 2002).

The televisual portrayals of the male as producer and controller of media (*Studio Sixty on the Sunset Strip, Barton Fink, The Director, The Matrix, Johnny Pneumonic*,[9] *Swordfish, Sneakers*, etc.) help to maintain the status quo and what is more, there seems to be an underlying perception that "women are useless with technology" (Gill, 2007). From Lucy's famous inability to keep up with the chocolates on the conveyer belt in the old *I Love Lucy* series to Trinity's inability to defeat the *Matrix* without Neo, women have long been depicted as incapable of tackling technology. This is a symptom of a larger delusion, that technology is the realm of men, and women should rely on men to control media, which begs the question, how does this trend begin and how does it lead to indifference towards media production in girls and young children?

Roots of indifference and possible solutions

The genesis of this calculated ignorance and/or indifference towards media production may begin before high school: according to Caleb (2000) and Sanders et al. (1997), toys designed for boys tend to be highly manipulative or electronic while girls' toys are not. For boys, wires and electricity are "fun toys" so girls are more likely to discount the importance of traditionally "boy" pastimes, and in some cases even being dissuaded from playing with such objects.

Furthermore, it has been found that girls who are not exposed to toys that encourage scientific, mathematical or technological thinking are less likely to develop an interest in related

[9] Actually in old school cyberpunk (Gibson, 1984), women were often given the role of warriors, bodyguards for geeky males who, although controlling technology, aren't particularly good at protecting themselves. The message remains the same: men control the keyboard and men turn the switch that saves humanity.

subject areas at school (Sanders, Koch and Urso, 1997). Is it not possible that since manipulative electronic toys are not part of girl's experience, rather than dealing with problems that may consume time, girls might simply learn to defer such problem-solving tasks to males who show a keen interest in these often tedious endeavours? At the risk of seeming essentialist, it seems that boys grow up expecting to know a lot about technology while girls are socialized to be good with people (Bloustien, 2003).

As mentioned earlier, Kearney (2006) focuses on the problem from the perspective that the world of media production has become "yet another boys' club" pointing to the lack of any serious attention being paid to the education of girls in media production in the U.S. In her work, Kearney illustrates how paths to empowerment are blocked, and points to attempts to undermine girl/women limitations through text based media (Zines). She also provides evidence that girls do display competence in the production of media in certain environments,[10] and argues that women do desire to produce film, but are unable to thrive in a male dominated society.

There are also those who believe that females' lack of participation in ICT and media production can be attributed to a curriculum that is biased toward males' interests (Sanders, Koch, and Urso, 1997) and/or that girls are generally turned off by the approaches to pedagogy found in many schools (Shroyer, Backe and Powell, 1995). While there is, of course, a competing set of arguments about the ways in which schools favour girls in the vast range of new studies in 'what about the boys' (Fletcher, 2006; Absi-Semaan, 1993), there is contrasting evidence that pedagogy is male-centred, supported by the early work of the MIT Computer Science Female Graduate Students (1983), as well as more recently by Sanders (2005, 2004, 2003), Sanders and Hewitt (1997), Kearney (2006), and Kay (2007). ICT is seen as a boys'

[10] Kearney advocates "women only" spaces as a technique for dealing with any disparities but Rosalind Gill (2007) retorts that perhaps segregated classrooms and women only spaces are not the answer, but rather what is needed is a full integration of girls into the education of mainstream media production practices (Gill, 2007). The only way to change the system is from within, and although girl only classes create a safe environment for girls to thrive, it does not prepare then for the eventuality of having to co-exist with men in the workplace.

domain where "masculinity, not femininity, is the problem," where boys "consider themselves the hosts in that environment, with girls as guests" (Sanders, 2005). This seems well entrenched as girls begin to develop increasingly negative attitudes towards ICT as they reach Grades 7 and 8 (Kay, 2007). Also supporting this school of thought are the findings of Wasburn and Miller (2006), who claim that girls' and boys' attitudes towards technology begin to be shaped in elementary school, "solidified" by high school and school is where girls develop an understanding of what social roles are appropriate for them. In the UK, Hollaway and Valentine (2003) argue that it is in schools that teachers draw on "entitlement curriculum" and pupils draw on this as well as on a wider understanding of concepts of masculinity and feminity through links to a wider space:

> "The multi-layered institutional cultures of the school sanction, through both social and material relations of control, certain forms of behaviour, which conforms to pupils and teachers stereotypes of gender-appropriate behaviour. In doing so, cultures make other choices less likely" (2003; p. 70)

This is especially important due to the technology/gender interface discussed by Johnson (2006) where she refers to as the "co-creation" theory.[11] As discussed in Chapter One, Johnson goes beyond the notion that media alone affects culture as discussed by Bordieu (1993), and instead postulates that gender and technology co-create each other, that gender patterns in society are reproduced by "constituting technology," that technology shapes society and that "if gender has been coded into technology, that technology may reinforce gender patterns" (Johnson, 2006; p. 4). Johnson argues that gender affects technology and technology affects gender, and as such

[11] This theory in a sense echoes the media/culture loop depicted, but focuses primarily on gender, not culture in general

we are in the midst of a transformation where the nature of technology has altered the appearance of technology. This appearance naturally appeals to males more than females since males designed the interface and design specifications.

It is important to note that certain inroads to media production do exist, particularly in journalism (Diaz, 2009; Statistics Canada, 2007), and on-line fan participation (Jenkins, 2006). Women have been gradually increasing their numbers in the field of journalism, now composing 41% of all journalists in North America (Peters, 1999), and according to the Boston Globe (Jurkowitz, 2003), women comprise 64.1 percent of journalism undergraduates in the U.S. while women accounted for 60% of all Canadian journalism students in 2000 (Statistics Canada, 2007). It seems that women have discovered print journalism as a possible career option (see later section in this chapter on *Devil wears Prada*), and this trend demonstrates a potential for women to shift demographics in a selected form of media. This model could serve as a template for entry into other forms of media production.

Support for the notion that digitization assists women in their pursuit of media production can also be found in the domain of on-line fan sites where women comprise the majority of producers (Jenkins, 2006): "Fandom is a vehicle for marginalized sub-cultural groups (women, the young, gays, and so on) to pry open space for their cultural concerns within dominant representations" (p. 40). Jenkins explains how improvements in ICT permitted a culture of "do it yourself" (DYI) adaptations of media (reminiscent of the Grrrls print media discussed by Kearney and others), allowing fans to create their own variations of existing media.

According to Jenkins and others, fans were early adopters of digital technologies and women found support in fan sites: "fan communities helped many women make the transition to cyberspace" (p. 138). Also, the relative ease of drag and drop applications facilitated entry by

women to what had been a previously male world. The "community" variable mentioned by Jenkins is particularly interesting to note and might give some insights into a curriculum of media production where community can and should be stressed. The message from Jenkins' research is clear: when media production looks like communication (reaching out personally), women will produce.

This notion is supported in Holloway and Valentine's *Cyberkids* (2003) where the authors found that boys like computing more and "girls are alienated by computing culture and only tend to claim their place within it when the communications aspect of ICT are emphasized" (p. 68). Holloway and Valentine claim that some of the functions that the computers have to offer are important to girl's interest, and that classroom practices are essential in focusing on the interests of girls but warn that institutional cultures of school's control "through both social and material relations, certain forms of behaviour which conforms to pupils' and teachers stereotypes of gender-appropriate behaviour" (2003; p. 70). They contend "these institutions are forever solidified in their current form rather than open to change . . ." (2003; p. 70) and the authors cite examples of girls taking more interest in ICT when E-mail was provided and the communicative aspect of ICT was emphasized.

This is important to note since there are precedents that demonstrate that stereotypes of gender appropriate behaviours can be successfully challenged: in the past twenty years, women have gone from 44% of all medical students in Quebec in 1989 to 68% by 2004 (Medi-lexicon International, 2004). The University of Laval has a rate of 74%, the greatest proportion of women in the entering the field of any Canadian medical school[12]. Perhaps this trend is a precursor of what will happen to women when they "discover" the field of media production. If girls don't believe they can enter a field, or feel that it is a "man's place," then should it surprise

[12] McMaster University in Ontario follows closely at 71% (Medi-lexicon International, 2004) demonstrating this is not a Quebec phenomenon.

us that it is not found in girls' selection of possible career paths? The problem is that these institutional stereotypes are supported by those images provided by images portrayed in the media, a "normative reflexivity" that continues to portray woman as unable to produce media. TV has provided positive models of women in the field of medicine (*ER, Grey's Anatomy*, etc.), so perhaps what mediature requires are similar models of women as media producers, which until now has been noticeably lacking.

Representation of women in media

Apart from the obvious inequities associated with 50 percent of the population participating in less than 20% of media produced, the majority of the content of media produced targets young, middle class men: "All advertisers are chasing the elusive 18- to 34-year-old male market. Little wonder that the starring role in two-thirds of TV situation comedies is played by a young man" (Media Awareness, 2008). This begs the question "why aren't women being served?" The reasons for this are obvious: since men are the principal producers of media, it seems 'natural' that they present male stories, male fantasies, and male dreams. This phenomenon facilitates a state of hegemony where mediature's media/reality feed eternally loops, and in turn dictates normative gender expectations.

The stress on males found in TV, popular music, and film is ominously being replicated on the Internet (Holzschlag, 2007). In fact there is interesting evidence to support the notion that gender preferences in website production is affected by the sex of the producer. Specifically, men have a tendency to prefer home pages produced by men, but women's preference for sites produced by women is significantly stronger than the preference found by men (Moss and Gunn,

2009). In other words, men are just as likely to visit sites produced by women, but women are less likely to prefer sites built by men over those built by women. As pointed out by the authors, "these finding of gendered differences in website production and preference aesthetics has important implications for teaching and assessment" (Moss and Gunn, 2009). It is possible that directing girls to web sites created for them and by them might alter mediature, and directing boys towards the same sites might facilitate a "de-genderfication" of their normative expectations.

This is not to say that if more women were involved in media production, the Internet and television would necessarily become "better," or no longer exhibit gender bias and/or exploitation of women, but most certainly it would alter to resemble life or something like it a bit more accurately:

> "research has suggested that when programs employed women in pivotal positions such as writer, creator, or executive producer, the creative product was different. Remarkably, the employment of just a single woman creator or writer on a situation comedy or drama was associated with significantly different on-screen portrayals of both female and male characters when compared to programs with all-male creators and writers" (Lauzen and Dozier, 2002)

This is another example of the theory that **who** produces media manifests itself into **what** is portrayed and more specifically **how** women are portrayed. Lauzen (2005) points out that women have consistently represented only 40% of the characters on TV shows in the US. Of these, women over forty only represented 10% while men over 40 accounted for 22% of all men

on screen. Supporting these findings are those of the Smith and Cooke (2008) report for the Geena Davis Institute who point out that three out of four characters in G-rated movies are male (with implications that children will quickly pick up on) and that of the top 100 movies released between 1990 and 2005 only 17% of the characters were female. Of those rare female characters, the majority were highly stereotyped (Davis Group, 2008).

The implications are multiplied exponentially due to the vast overseas market buying into and importing American mass media (Bielby and Harrington, 2005). This lopsided view of reality is exported and replicated throughout every aspect of the world where screen culture exists, supporting the hypothesis of mediature as a perpetuating construct.

Applying the notion of mediature's media-culture loop, girls/women read the portrayal of women on TV and in films as ineffective and unable to cope with the pressures of media production (see for example *Up Close and Personal* and *Murphy Brown*) or send the message "you may be free and equal now, but you have never been more miserable" (Faludi, 1992, Gill, 2007). Faludi and Gill both discuss the "backlash" effect where female columnists discuss the underlying theme: "feminism is bad for your health, your relationships and even your psychological well being" (Gills, 2007; p. 129). Even the purportedly feminist TV series *Sex in the City* ended when the main character, Carrie Bradshaw, leaves her position as a columnist in New York to live with her lover in Paris and then be "rescued" by her millionaire boyfriend who whisks her away to his chateau in the Hamptons. While the effect that these messages have on young viewers is not obvious, Lauren and Dozier argue:

> "media portrayals that underrepresented and/or misrepresent females in positions of power and leadership may have real-life consequences for girls and women. Studies of

> media use and sex-role socialization reveal that televisual portrayals influence children's notions of appropriate occupational expectations and choices (Lauzen and Dozier, 2004).

Girl and women may see these media representations and buy into them, assuming that they should not be striving to be media producers (or any type of power figure), and that men get to do all the 'fun stuff,' supporting Johnson's theories of cultural reproduction. When women are represented in media, they are trivialized and attempts to gain status often lead to heartbreak and burnout (Gill, 2007). Moreover, most of the women featured in the media are younger than the general population and are significantly more likely to be identified by their marital status (Lauzen, 2006). Would this trend continue if women became the producers of media, or might it take on a different look? Might the content of TV and film not become less plot-driven and include more character development, more complex themes, and perhaps involve a few less car chases and murders if women were behind the cameras?

Some may argue that there are instances of women portrayed as having positions of power, but these women eventually leave their positions of power: These include Carrie Bradshaw in *Sex in the City*, and Jordan McDeere in *Studio Sixty on the Sunset Strip* who is depicted in the series finale divulging she is pregnant, leading to her forced termination and one of the male leads offers to support her. In a previous decade, the *Murphy Brown* series ended with the title character struck by cancer (wrath of God?), needing to take an undisclosed amount of time off where she will be cared for/supported by her live in (male) painter/contractor.

More often, women in positions of power are cast as villains and/or "bitches." Hollywood and TV have given us a wide variety of caricatures to choose from: Disney's portrayal of villainesses includes Cruella DeVille, a millionaire bent on using puppy skins for fur, and a

chorus of evil queens, princesses, and other high ranking positions that "good" girls should never think to aspire to. The televisual infers that somehow power "unsexes" a woman (Shakespeare's Lady *Macbeth* as the prototype), and turns most powerful women generally into puppy-killing sociopaths.

In the adult world, role models of women in power include the Bond girls, Glenn Close as Alex Forrest in 1987's *Fatal Attraction*[13], Demi Moore as Meredith Johnson in *Disclosure* (1994), and more specific to the issue of women in media production, in *The Devil Wears Prada*. In the 2007 film, Meryl Streep's character Miranda controls the fashion world from the perch of a fictitious magazine, "Runway". Streep portrays the ultimate super-bitch while the sweet protagonist Andrea Sachs attempts to exist in a world where only the bitchy survive. After a dénouement, Andrea gives up her promising career as Miranda's protégé opting for a low paying job as a journalist at a local paper where she belongs[14]. The message is obvious; success equals bitchiness, and for a concise listing of the names of various characters that contributed to the "backslide" of feminism in the eighties, read *Backlash: The Undeclared War Against American Women* (1991) by Susan Faludi.

TV has given us Joan Collins Alexis of *Dynasty*, Amanda Woodward of *Melrose Place*, and so on, all sending the same message to show girls that being powerful means being evil, and good girls don't take well to power. With a few rare exceptions (*The Cosby Show*) women on TV are working class, heterosexual (barring the now defunct show *Ellen* and a few stolen kisses on *Roseanne* and *Grey's Anatomy*), and with a few rare exceptions, good girls/ woman who lack any real power. It is no wonder that girls do not pursue positions of power, since they all know what is in store if they do. In the existing mediature, women who do enter the field of media

[13] Susan Faludi takes particular offense to this film along with Kathleen Turner's femme fetal in *Body Heat.*

[14] As we have seen, it is now acceptable for women to be print journalists, so dictates the loop of mediature.

production can look forward to three possible scenarios: termination due to pregnancy, terminal bitchiness, or terminal cancer.

While having more women involved in media production should not be equated with an increase in the quality of media production or even a challenge to existing normative views of female behaviour, girls should be more actively encouraged to consider this otherwise male dominated field. To extend the violence in movies metaphor, digital technology is the Colt Peacemaker of media production; you don't need big muscles to make media, all you need is a desktop and the proper software. Students are now being given equal opportunities to create media, and often do (Sefton-Green, 1998; Buckingham, 1998; Hobbs, 2006), so it might be prudent to present media production as something that girls could consider as a girl friendly communication tool instead of presenting it as the boys' toy that it often is.

Of course there are still many obstacles to be overcome: Joanna Coles, political reporter for *The Guardian* in Britain, reported on traveling the campaign bus with her male colleagues as 'a minor stag party' (van Zoonen, L. Brants, K. and Joke, 1998). Coles states that women in media have to prove that they are "one of the boys." Orwin and Carageorge (2001) studied women taking film and animation courses at the Rochester Institute of Technology and noted that they were "not as confident in their technological knowledge as are men," and, "there is an assumption men come into the course knowing how to operate the equipment." (p. 43). Furthermore, "women are often silenced by fear of giving or receiving criticism" (p. 45) and this leads to difficulties in taking a leadership role in media production. This is a self-fulfilling prophecy, and by empowering girl/women by offering opportunities to take leadership roles in media production in high school, this type of fear could be significantly reduced in girls/women

who have produced their own films or web sites entering the field, giving them the advantage of already knowing how to operate the equipment and/or software.

One of the more interesting observations in a 2001 Orwin and Carageorge study was that, "women relied on men to transport heavy equipment and are limited to crew roles because of their physique" (50).With the advent of lightweight equipment[15], the nature of the media technology has changed, and there is a radical transformation of the size and complexity of media equipment reduces any need for physical prowess as a variable in media production. Digitization has levelled the playing field, creating a new generation of female producers, which has not gone unnoticed.[16]

Research into Women and Media

It is impossible to do this topic justice in a single section of this work: suffice to say, an in-depth investigation into the full volume of work on women and media could become a major work in its own right. Historically, media as a specific topic in women's' studies begins in earnest with Virginia Woolf in *A Room of One's Own* where she discusses how women could become writers given the proper circumstances. Woolf specifically discusses how women could affect change by entering the mass media (newspapers) in her 1938 *Three Guineas* where she advocates the training of young women in journalism as well as a restructuring of college education:

[15] Sony just released a ten ounce camera for under $300 Canadian that is easy to use and uses memory cards instead of wires to download video directly to the computer (look ma, no wires!)
[16] Tina Fey, writer for Saturday night live from 1999 – 2008 and creator/producer of critically acclaimed *30 Rock* was listed in *Rolling Stone's* "100 People Who Are Changing America" list in 2009

> “Do not have museums and libraries with chained books and first editions under glass cases. Let the pictures and the books be new and always changing. Let is be decorated afresh by each generation with their own hands, cheaply” (Woolf, 1938).

As early as the 1960s, Bette Friedan discusses how the media manipulates the portrayal of women in her generative work *The Feminist Mystique* (1963), though she does not specifically advocate women taking control of media as a means of social change. Friedan discusses the media as contributing to “the problem without a name,” and she point to specific instances of mass media perpetuating stereo-types, suggesting that the problem was based in women themselves and cites sources that went so far as to suggest that women no longer be permitted to go to college. In an allusion to the indoctrination approach, she gives examples of media manipulation of women and misrepresentation of women (“if I only have one life to live, let me live as a blond”) as well as feeding women’s poor self image by portrayals of a specific “look” that most women do not have.

Tuchman, Kaplan and Benet authored *Hearth and Home: Images of Women in the Mass Media* (1978), studying the manner in which women were misrepresented (“symbolic annihilation”) by media, portraying the media as part of the problem. Laura Mulvey’s (1989) essay, "Visual Pleasure and Narrative Cinema" (originally written in 1973) focused on the lack of female representation in films, predating the Geena Davis Group by thirty years (and demonstrating nothing has changed in that time). Mulvey used Freudian theories as a basis to her thesis, and although her work was groundbreaking, she was constrained by an era of obsession with Freudian theory of castration and penis envy: “Woman's desire is subjected to her image as bearer of the bleeding wound, she can exist only in relation to castration and cannot transcend

it." (p. 143). Somewhat dated by the socio-historical context of the 1970s, she presented a succinct vision of woman's role in the media and coined the term "scopophilia" to describe how women have been transformed into objects "subjecting them to a controlling and curious gaze." (1973). She does not discuss the notion of women as producers, but her work is critical in the discussion of the representation of women in media.

As the critical pedagogy movement of the eighties took hold, Steeves (1987) explored how the media might be used as a vehicle to advance women's ideas, status, and political power in a work related to the critical pedagogy movement. This is one of the first works that advocates women using media to take power instead of being victimized by it, although much of her work depicts how violence against women in portrayed (or downplayed) by mass media. This step in the right direction typically advocated the indoctrination approach, but instead of simply striving to "protect", Steeves implies that media and technology can be used for positive social change.[17] Her work is generally expository in nature and portrays various feminist perspectives. She points out that various forms of feminism recognize how media can be used as a vehicle of change, and advocated learning the control of media as a means of advancing feminism:

> "Radical feminism argues women must create, at least initially, their own media environments where they can learn to speak freely and openly in their own language. Liberal feminism assumes specific changes within the existing system ultimately can achieve freedom of expression and equity for women." (1987: p. 96)

[17] This is a feminist approach within the critical pedagogy movement of the 1980s: Aronowitz and Giroux initially voiced a distrust for new media in their 1985 *Education Under Siege*, viewing digitization as being another stage in the reduction of the power of workers (p. 189): "technological changes were introduced in order to reduce labour . . . office automation now generalized to nearly all banks, insurance companies and head offices of major corporations is reducing the ratio of labour to output and rendering old skills associated with clerical labour obsolete." Eight years later in *Education Still Under Siege*, (1993) they began to see the advantages of using new media as a tool of social change: "The unfulfilled promise of hypertext is that it abolishes all forms of intellectual authority, revealing in the process that "standards" are socially produced, usually in behalf of the claims of the powerful to act as legatees of culture. In other words, what hypertext promises to expose is the authoritarian character of taste; it is a weapon of the powerless in the struggle for control over the signifiers of culture." (p. 190)

Her discussion of the radical feminist approach to the use of media for social change puts forth a notion that recurs in ensuing works: women should create women only spaces for women to develop as media producers. This debate will reverberate through works relating to women's media productions and the debate of what method will best facilitate girls' control of media production in the works of Bloustien (2003), Kearney (2006), Gill (2007), and others.

Another feminist writer who advocated embracing rather than rejecting new media in the 1980's was Donna Haraway. More philosophical in nature, Haraway's work is indispensable in creating a philosophical groundwork for the notion that women should embrace technology and transform it rather than fall victim to it. In her 1986 *Cyborg Manifesto*, she attempts: "to get American socialist feminists used to the idea of politically negotiating through a technological world." (Senft, 2008). Haraway broke with the "back to nature" feminist movement and was one of the first to see the potential for women of technology in furthering the feminist cause rather than victimizing women. Haraway promotes the idea of media production and in her later work (1997) *Modest_Witness@Second_Millennium.FemaleMan©_Meets_Oncomouse*™ she claims that "hypertext is easy to use and easy to construct, and it can change common sense about what is related to what" (p. 125), appropriating the notion of hypertextuality. This is an important assumption, validated by examples of poststructuralist systems of intertextuality and postmodern fiction. She expands on the idea of hypertext as a metaphor for a feminist pedagogy, and advocates technology as the solution, not the problem, departing from the indoctrination approach, and thus paving the way for a more positive approach for girls using technology.

The title of her book introduces her thesis that scientists witness science in action and that the history of scientific research has been devoid of women for so long, women must re-learn how to witness: "Thomas Hobbs decided that in 1650 that knowledge is dependent on a practice

of witnessing by a special community . . . a public space with private access." (p. 25). Haraway goes on to explain how women were forced from the ranks of scientific witnesses three hundred years ago and only just returned:

> "the first women admitted to the Royal Society, after lawyers' advice made it clear that continued exclusion would be illegal, entered in 1945 . . ." (Haraway, 1997; p. 33).

As she highlights, women watching experiments of small animals being deprived of oxygen protested at the cruelty of this experiment and requested that the animals be freed before death since the experimenters had made their point. The men were not amused at the women's empathy and felt that women had little business witnessing science and so yet another sexist tradition was born. It was a tradition that still makes women question their role in science and presuppose that technology is a man's world since science is a culture of no culture (and as Kearney points out, only those who are in power do not recognize themselves as part of a group).

Haraway begins her discussion by stating how only a "modest man" can remain "transparent" and objectively watch the rape of nature, something that apparently women aren't very good at (or at least according to Boyle and others). After offering a survey of the history of science, she argues the post-modern deportment that we are too quick to believe that science is the answer to all our woes while she reminds us that the progress within "the culture of no culture" is that, "the promise of technoscience is arguable its principal social weight." (p.41)

Haraway uses metaphors extensively in her work and the most relevant to this work is "Femaleman", a new hero that is not a "an unmarked feminist utopian solution to a supposed

universal masculine domination" (70) but instead is "a real hero and not as plot space for someone else's action (71). She reminds us that science is, "cultural practice and practicing culture," and she advocates that women participating in the creation of technology as a truly liberating act. She is extensively referred to in subsequent works on women and media and her work is pivotal in laying to rest the "back to nature" movement in feminism that constrained women's involvement in media production. More than that, her work is seminal in creating a philosophical basis for work on the topic of women and technology.

By the beginning of the millennium more and more research was taking place in the realm of girls' production of media, focusing on range of issues including traditional text based media (Comstock and Scharrer, 2005, 2007; Kearney, 2006), exploration of girls' online spaces (Reid-Walsh and Mitchell, 2002, 2004, 2007; Weber, 2007; Harris, 2004), and music (Klein,1997; Bloustien, 2003). Discussion of girls producing media in the classroom includes the work of Bloustien (2003), Kearney (2006), Weber (2007), and Mitchell (2007).

David Buckingham (1998, 2005), and Buckingham and Sefton-Green (1994, 1995) allude to gender in production, but rarely mentions it overtly until *Cultural Studies goes to school* (Buckingham and Sefton-Green,1995) where they devote an entire chapter to looking specifically at girls' productions in a chapter on critical pedagogy entitled, "Solving the theoretical problem". In that chapter, the focus is not so much on the discussion of girls' productions as such but rather in relation to "the power relations of gender and race" (p. 188) in the critical pedagogy tradition (see footnote 17). What is striking about this work in particular is that the majority of the examples discussed are created by girls for girls, but they do not overtly address gender issues in this chapter, only alluding to gender by their examples (a *Cosmopolitan*

parody). Still, their research on the study of classroom practices in media production is invaluable in relation to constructing ideas around production itself.

More specific to the study of girls and media, Rosalind Gill's *Gender and the Media* focuses primarily on visions of women in media rather than women's productions, "the book is primarily about representations of gender in the media – rather than media productions," but she then goes on to discuss girls media production at length. She downplays the importance of zines to women's media, stating, "Young women's' Grrrl zines are particularly vibrant and inspiring examples of this; alternative media have a major role to play but the problem is the fact that they are only seen/consumed by a small number of (usually self-selecting) people, and also that whilst offering an alternative they leave the mainstream intact and unchanged." (2007; p. 37). Gill later questions the wisdom of women-only media spaces and advocates that "the campaign for women only spaces and the campaign for women's interests to be taken seriously right across the output of the media were not mutually exclusive" (2007; p. 35).Gill makes some critical interpretations of feminist media studies and brings to the table some unique problems, including the idea of women selectively opting out of certain aspects of media and technology:

> "women chose not to learn how to program the VCR, lest it become yet another job for which they become responsible within the household. . . this is 'calculated ignorance': it was a deliberate and strategic act of resistance on their part, even though it might be understood by their husbands and others as simply an indication that 'women are useless with technology" (Gill, 2007).[18]

[18] With this in mind, one begins to question how many other times women choose not to become involved in technology for reasons that are both calculated and/or ironic (due to the fact that women are in some cases inadvertently living up to the stereotypes assigned to them by men).

Rosalind Gill also orchestrated a debate between notions of images of women in media as being objectified versus those who see the same images as empowering. After presenting both sides, she left the debate open for further discussion, not claiming to have the answer (if you meet the Buddha on the road, kill him). At the same time she critiqued those who purposefully attempt to disguise put-downs of women as post-modernist humour: she cites the men's magazine FHM as well as *Family Guy*, *American Dad* (and just about everything else Seth McFarlin has ever written comes to mind), self deflecting, an attempt to "defend against critique . . . moving to silence anyone who wishes to criticize it – since they are already positioned in advanced as lacking humour and sophistication," (p.) enacting a sort of 'you just don't get the joke' line of defence.

She also offers insights into various forms of analyzing gender in media texts, from the traditional to the not so traditional ("a group of perspectives not yet represented by specific studies"), always with a critical eye, focusing on emerging perspectives on discourse analysis, with discussions of Foucault, as well as content analysis (that echoes Geena Davis): "why do women constitute only 30 percent of people on television when they make up 52 percent of the population" (p. 44), but it cannot or does not distinguish between levels of meaning and basically tells us "what we already know" (p. 45).

The year 2003 was a milestone in the study of girls and media with both Holloway and Valentine's *Cyberkids* and *Girl Making* by Gerry Bloustien being published. As I describe below, these works seem to be the harbingers of the contemporary age of the study of girls' media production. The former focuses upon online behaviour while the latter, girls as film producers.

Girls in cyber-space: communication is the key

> "Though men are early adopters of technology, women dominate social media. Women between ages 35 and 50 are the fastest-growing segment." (Gibbons, 2007)

The communicative aspect of the Internet is essential to understanding how to challenge male dominance of technology, and a source of insight into the communication/girls/technology nexus found in Holloway and Valentine *Cyberkids* (2003). Holloway and Valentine first argue the effect of computers on culture focusing specifically on the computer's effect on children in 'cyberworlds' drawing specifically on the work of Haraway, Jenkins, and McLuhan. They studied British children's attitudes towards media and ICT while discussing parental anxieties and their interplay into the cultural consequences of the computer including the renegotiation of the boundaries of youth and adulthood.

Holloway and Valentine also discuss the digital divide on several levels: first as an issue of economic class and speak to the ramifications of such disparity, then from the perspective of geography, ranging from the international, national, and local context as well as the home versus school. They then funnel their work to focus more on the digital gender divide found in the classroom and give important insights into gender differences in classroom culture.

They studied three secondary schools in England, one rural (Cornwall), and two urban settings (Yorkshire) classified as "disadvantaged". They gave out surveys to 756 children and then conducted follow-up observations in the schools asking about computer and Internet use both is school and at home. In the end, ten children (and their families) from each school were interviewed in depth about use of media and computers in the home, competence, conflicts over

use, ownership, location and control and if the computer and/or other forms of media (i.e. VCR, gaming consoles, etc.) had any effect on household relations.

Holloway and Valentine illuminated trends that exist to this day: how parents felt that computers were essential to their child's education and/or future; the fact that the computers more personal attributes made it disruptive to normative patterns of family bonding (gathering around the TV as a share activity). They also noted that boys were more likely to have computers in their rooms[19], and on an interesting side-note, this reduced the amount of boys' street culture, creating a new form of boys' bedroom culture, analogous to girls' bedroom culture where the computer has become part of girls' culture as discussed in Reid-Walsh and Mitchell (2002, 2004), and Weber (2007). The computer as part of boys' bedroom culture was recognized by Livingston (2002) who claimed that for boys, street culture is being replicated in the bedroom, online.

Holloway and Valentine made some important findings to the study of girls' media production and media in general, and particularly imperative was the "we can/I can't" phenomenon where the female students argued they believed that girls as a whole were as good at computing as boys but they (the girls interviewed) personally were not. This inconsistency between the social or public face versus the individual self or private face is fascinating and may account for large part of the problem being studied (girls don't do wires because they figure other girls are doing wires?). They elaborate on the 'we can/I can't' phenomenon, explaining how it also becomes inculcated: girls interviewed felt that "girls as a whole were as good at

[19] Buckingham (2002) also noted this phenomenon, citing parents' belief that like TV, computers were educational and would give children an advantage in school.

computing as boys, that some girls were better than other girls, but that girls as a while were just not interested in talking about them" (2003; p. 60).[20]

This is another important finding, the discovery that the girls demonstrated a noticeable lack of interest in talking about computing. This silence surrounding competency in computer-competent girls was coded by Holloway and Valentine as highly strategic since the girls realized that their technical competence was not highly valued by their peers and "they do not want their identities to be re-coded as nerds" (2003; p. 60). Having insights into the home setting, the authors found that these same skills were prized at home by parents and so these girls were skilled "social actors," who demonstrated competence at home but then used their skills sparingly at school, gaining respect for that skill in class when necessary. The authors reported that this social posturing was more notable with boys' culture: "the techno boy's interest in computers is constructed in 'feminine' terms by the lads", (p. 68) and "some of the lads make jokes that suggest that the techno boys are gay because they do not, in their eyes, behave as proper" (p. 69). This is seen "in the girl's heterosexual codes of desire the techno boys are considered both socially and physically unattractive" (p. 68).[21] This may indicate that many of the incidents of indifference or 'calculated ignorance' are actually strategic (not unlike Gill's VCR example earlier) and Holloway and Valentine's discovery merits further study.

Another essential finding of this study is that girls' attitudes towards computing were affected by its use as a tool of communication, Specifically, girls' access or lack of e-mail access at home (and more importantly at school) seemed to have a profound effect on girls'

[20] One cannot help but wonder in how many other instances does this level of thinking take place, and what effects does it have on society as a whole.

[21] For the purposes of my project, it might explain why boys consistently perform less well than the girls. If we apply these findings to my study, the boy's behaviours in my y classes might have been strategically played to avoid being classified as "nerd" by their peers. The girls in my study seemed less affected by these labels, although certain girls downplayed their skills in the classroom, engaging in off task behaviour (game playing, talking off topic and surfing the net in class) but "secretly" did much of the work at home, out of their peer's gaze.

attitudes towards using the computer. In one of the schools they studied, the availability of e-mail access aided in the development community and a generally positive female culture towards computers: "availability of e-mail is contributing to the development of girls' computer culture" (p. 69). In that school (Westport) girls were more interested in out of school access to the Internet than boys and it was the only location where girls demonstrated much higher interest in all aspects of computing, though boys did exhibit slightly higher (but not statistically significant) levels of all activities aside from e-mail.

When access to e-mail was available, girls tended to have much better attitudes towards computing, validating the notion that girls more enjoy the communicative aspect of computing[22], seen in several other studies (Eagly and Johnson, 1990; Gilligan, 1982; Fallows, 2005), an important justification of the QEP's stress on technology as a form of communication as noted in chapter one. Holloway and Valentine's insights contributed to the understanding of the finding of this project both through their methodologies and by providing a guide for the observation of certain "truths" that resurface in this project (downplaying competency, strategic silence surrounding ability, interest in ICT for communicative purposes), absolutely essential in aiding in my exploration of why girls don't do wires: when wires are seen as a conduit for communication, girls suddenly feel at ease with technology, and quickly adapt.

Another crucial work on girls' media production is found in Kearney's *Girls Make Media* (2006). Her work will be discussed at length in the section on film making (she spends an equal amount of time on the various forms of girls' media production, from print web design to film), but her final chapter is especially useful as a model of methodology for my own project. Her

[22] A finding replicated in my research (see chapter 5)

study of "digital girls" is an extension of her girls' zine section, with focus on the empowerment of women creating a business on-line.[23].

The respondents averaged in age from eighteen to twenty-nine, with an average age of 22.2, and most of the young women were in their early twenties, making most of them above high school age. She surveyed the women's experiences and categorized them by age and experience, pointing out that their private experiences on-line coincided with the age of school experiences (14.9 years of age), but notes that of all her subjects, only one was inspired to create web pages from her experiences in computer class.

Kearney provides an effective template on how to conduct a study of the production of girls' media, and for that I am most grateful. Her methodology includes focusing on twelve women chosen from an initial pool of 26 "distro" owners, home-spun on-line sales run from the women's homes. It is particularly interesting because it not only allows for a survey of skilled participants of digital culture, but this particular type of web design blurs the lines between consumption and production as discussed in Lister's (2003) discussion of "prosumers".

Her methodology is simple, efficient, and thorough: gather samples of women's media production, use surveys to gather information, interview and discusses the producers' choices, then analyse their media productions. By doing that she is also able to analyse women's on-line culture in the same anthropological manner as Bloustien (2003), gathering insights into what women's on-line culture looks like from the inside out. She does seem to negate the importance of formal education in media production, but her discussions of the importance of education in and around media production are essential to this field of study.

[23] Although her study deviates somewhat from the study of the classroom experience, and she circumvents the entire notion of formal training since most of the women in her study of producing web sites were self-taught, her method was especially useful for the design of this study.

Another important work on women's production is Henry Jenkins' 2006 *Fans, Bloggers and Games: Exploring Participatory Culture*, an interesting side-step from feminism to cultural studies. It is a compilation of articles written in the nineties and early part of this decade, so some of the content material seems dated (discussion of *Star Trek* fans, a fan site based on David Lynch's *Twin Peaks*), but most important to the study of girls' media production is Jenkins' discussion the phenomenon of "Slash culture" as a female space.

Slash Culture (or fan culture) refers to fans appropriating the ideas that make up a TV show (or films), elaborating on it by making their own episodes (now possible with digital film editing), or writing entire episodes themselves, something I have witnessed young students engage in of their own volition. In his first chapter, Jenkins claims "Media fan writing is an almost exclusively feminine response to mass media texts," and although men participate in fan related activities, "women devoted more energy to reconstructing the textual world and understanding the characters" (p. 43). This is an incredible opportunity as a training ground for women who are interested in film production to get a start.

Jenkins quotes Camile Bacon-Smith who estimates that 90 percent of all media fan books and fan sites are created by females, a remarkable discovery demonstrating the possibility of subverting hegemony. Jenkins goes on to discuss the familiar notion that men and women write differently: "men want to deliver a "clear simple structure or chain of events . . . women present the narrative as if it were an atmosphere or an experience" (p. 44). This might partially explain the differences between the web sites and films of girl students versus boys' productions.

Jenkins gives examples of how fans write the unwritten stories (Slash) of the women of Star Trek, some of which get picked up by mainstream publishers, including an episode of Lt. Uhura and Officer Chapell from the old Star Trek show commanding a ship totally run by

women to aid a colony of radical feminists who have created a world without men. There is apparently a great deal of interest in discussing the homo-erotic nature of the relationships of major characters in *Star Trek* and other shows, and many slash works and discussion on-line focus on the hidden lives of these characters. What we have here is the creation of an entirely new form of production, impossible even a decade previous, where girls and women have a venue to explore media production in pubic spaces, not unlike the distro owners depicted in Kearney's final chapter on women's web businesses.

Jenkins' work is particularly usefully in any study of girls producing media because fan-culture is something students like to participate in, and is basically inseparable from bedroom culture and other aspects of tween-culture. Teens often create Slash in school (though they wouldn't know what slash is), and they often appropriate elements of TV shows and films into projects. Indeed, it has been my experience as a teacher that whenever students are given an opportunity to make web sites on a topic of their choice, the majority resort to the creation fan sites.

Fan culture itself has become entertainment; a fan film named *Troops*, a Star Wars fan film that parodies both *Star Wars* and the reality show *Cops*, has been the subject of a two page article in Newsweek (Jenkins, 2005). The digital revolution has given unlimited access to virtual communities of fans, which is important since the death of broadcast TV as the primary source of popular culture. In a 500 channel universe the days of everyone standing around the water-cooler discussing "Who shot JR" are gone but the Internet allows students to share in a community tracking a specific show since it is highly possible that no one in their social circle at school watched the same show as them the night before. Becoming digital producers online

seems more beneficial in a narrowcast world where interests vary so much and in a democratic medium (the Internet) where the gatekeepers are the prosumers themselves.

Jenkins gives insights into the dynamics of fan-sites and how they hold together virtual communities (probably a great part of the draw for girls). His chapter "Interactive audiences," provides a primer on the DIY (Do it yourself) culture surrounding the Internet Fan Culture, introducing Pierre Ley's notion of a "collective Intelligence," which seems the next logical step after the death of broadcast TV. Jenkins explains Levy's notions of a "cosmopedia" or digital utopia where "members may shift from one community to another as their interests and needs change, and they may often belong to more than one community at a time, yet they are held together through the mutual production and reciprocal exchange of knowledge" (137). Jenkins criticizes Levy, pointing out that Fandoms were essentially "virtual" communities long before the Internet and the notion of a prosumer predates the digital age (as pointed out in Mary Celeste Kearney's discussion of Zines). This is especially important to the study of girls producing media because the communicative is a space where girls feel most comfortable and has been shown to be a deciding factor in their attitudes towards computing and media creation (see discussion of Holloway and Valentine).

Jenkins' work provides a tie in for these two sections of on-line girls and girl film producers: one element discussed in Jenkins study of slash culture is that of Slashers making films and releasing them digitally on their sites. In this age of convergence, the two media are inseparable and women have already begun to produce videos specifically to share with others.

Research into girls' film production

The research into girls' film production is scant, but over the past decade, researchers have begun to enter the classroom and their findings often take on a dual purpose: 1) discussing media production and; 2) studying girls' culture at the same time. *Girl Making: A Cross Cultural Ethnography on the Process of Growing up Female* by Gerry Bloustien (2003) is one such study, taking place in Australia and studying the lives of young girls through the use of video cameras. Though not a classroom study per se, it is a study of high school age girls producing film.

It was published the same year as Holloway and Valentine's work, and provided a template for successive studies of girls' film production.[24] This work was important to my project due to the reflexive nature of any film where girls' culture is the subject of girls' productions. Bloustien developed a guide for ensuing reflexive studies, pioneering this particular approach to the study of girls' films. She felt that:" all aspects of reflexivity, issues of ethnographic authority of the anthropologist at home and ethical issues of representation of those studied" had to be addressed, and she "attempts to enter into a dialogue with those being studied." (p. 15). She advocated a methodology of "incorporating a deliberately self-reflexive camera within participant-observer and other fieldwork strategies" (p. 16) that allows for researchers to move beyond more traditional methods of observing adolescents, particularly female adolescents, focusing on youth culture rather than class, ethnicity or gender. This technique allowed her to observe "public performances and private selves," (p. 9).

She argues that this methodology involves a simultaneous examination of the living experiences that the young people face and an equally rigorous reflexive concern with the research process itself, since the researcher also is a historically constituted subject" (p. 18). This provides an appropriate model for the project undertaken here, although Bloustien was much

[24] Bloustien focuses on the anthropological aspects, NOT technical.

more of a participant in her subjects' work, following the girls to their spaces and occasionally working the camera.[25]

Bloustien is careful to point out that the girls' films are not an authentic record, but rather a "careful staging of the self", allowing for a transformation of the individual which is caught on film. Bloustien's interest is in the change that takes place in the film-making process and how the affordances of film allow for that change to be recorded. In his introduction to Bloustien's book, Jenkins specifies that the process is a part of the meaning and so merits as much weight:

> "The girls' selection process offers us enormous insight into the social production of meaning: they are not victims of the camera's voyeuristic gaze but rather the active collaborators simultaneous participate within and observing their own transformations into something different." (p. xi)

Bloustien discusses the way in which reflexivity takes place in the production of film from the stance that identity refuses to be static and that film allows us to represent ourselves to "others and ourselves in material form" (p.32). As a means of anthropological study, this method builds upon existing models of participant observer and allows for insights that would not otherwise by possible, to provide "a vicarious understanding of these more private spaces through the girls' discussions of the viewing of their videos" (p. 39).[26] She discusses three forms of film making that transpired: that of "the fly on the wall" that creates the impression that the camera didn't exist, or the "ask me a question" form, and a combination of the two. She

[25] Gerry Bloustien seems more focused upon the culture of the girls and using the girl's films ("the camera would venture where it would be inappropriate of impossible from me as an outsider and an adult" p. 39). This is essential to my work, but I focus more upon how they made their films and for me, the content was secondary.
[26] This finding gives credence to the technique of journaling, and interviews, both of which are used in the project.

highlights that all of these techniques comprise a documentary style "where the camera is used to record day-to-day events but its existence was not acknowledged during the film" (p. 237).[27]

Unlike my study, Bloustien is not explicitly teaching the girls' film, but rather allowing the girls to act as their own visual auto-biographers, so in that way she is engaging in a different process although she gives invaluable insights into a methodological approach to a complex procedure. She deliberately did not teach the girls "the usual standard ways of producing a documentary," (p. 46) and instead suggested the girls create their stories in "an experimental, open-ended manner" (p. 40),[28] and is much more interested in exploring how the recording process "blur the lines between representation and what is being represented between the signifier and the signified." (p. 31)

Bloustien focuses on the media as a tool of recording, and not on how the girls learn film, but rather portrays film as a cultural artefact, a "significant cultural symbol" in of itself. She cites studies into the use of still photography to empower and create cultural identities through appropriation of these media. She sees the camera as "a voyeuristic tool for surveillance and a means of control" (i.e. used by law enforcement agencies) as well as a tool for understanding others and for "monitoring the self" (reflexivity). She points out how film and photographs can be used to recreate the self "wiped out as if the had never been and new selves creatively reborn" (p. 46), which brings to mind the entire question of the reliability of film as a means of 'capturing' reality as discussed later in Chapter Five.

[27] It is important to note that I read Bloustien's work *after* my observations, so the similarity of my Canadian girls' techniques point to the notion of a "girl's film technique."

[28] In my own study, after having taught them scriptwriting in the first term, when I allowed them to work without scripts in the second.

When a producer is filming and then editing, s/he will inadvertently alter the sense of reality to create a narrative. To simply view hours of footage waiting for something to happen might give insights into reality, but the sheer monotony of such a task would necessitate the automation of the process (think video surveillance cameras) with its own constraints (static location and narrow field of vision). By its very nature, filming to monitor the self is not only an arduous process, but it entails editing and the creation of a narrative plot line. Bloustien freely admits that this is impossible: "I do not believe that the product of the video camera was ever simply a reflection of what was, of actuality somehow raw and unprocessed just waiting to be discovered" (p. 43), rather she believes that the camera is a means to view the discovery process of the producer and offers insights into ethnography, how "understanding and knowledge are negotiated and realized as part of everyday transactions in the world" (p. 39)

This discussion of how the media allows the girls to reshape their identities is elaborated upon in her second chapter and she makes an interesting use of the notion of editing images as "play" (albeit "dark play"), to 'play' with the "usual perceptions of the feminized body." In fact she devotes an entire chapter to a discussion of how the films are used to alter identities and notions of the feminine body. At times the body on camera is focused upon (one girl discovers a previously unknown zit when reviewing her film, another girl zooms in on a friend's face while saying "nice skin"). Other times Bloustien focuses on clothes (large loose tops to hide sexuality an/or physical imperfections or to signify ethnic or cultural alliances), and physical proximity, but she never spends time in depth discussing how the choice of shots or editing used, which would have been intriguing and should be a topic of future study.

Another issue that Bloustien brings up (invaluable to my project) is the effect of popular culture on self-identity and the girls' productions. She discusses the effect popular culture played

on the films, both as a feature of the products (music, clothes, etc.) and as a play between the "possible real" and fantasy. She claims that television, music, film and magazines were "the sites of the production of such play" (p. 30), not only to be utilized for consumption.[29]

This feature, along with the unusual anthropological techniques Bloustien developed, and her insights into the reflexive nature of girl's films all led me to useful insights into the phenomena observed in this project. The major difference between Bloustien's project and my own is that while Bloustien developed these techniques in order to study adolescent female culture at a depth not previously possible using more conventional observation techniques, I was an accidental tourist, stumbling across a panorama of insights into adolescent girls' culture I could scarcely have imagined. I was the teacher-student and teacher-researcher who gained knowledge from re-learning how to make films that explored self-identity of a group of naive anthropologists who told me much more than I ever anticipated.

Chronologically, the next work that focuses specifically on young girls producing film in the classroom is found in *Seven going on Seventeen* (2005) edited by Mitchell and Reid-Walsh where various researchers explore a variety of forms of female media production. The most relevant chapter to this project was that of Kristina Hackmann, "Video Girls: Between Changing Exploratory Behaviour and Self authorization." In it Hackmann facilitated a group of seven 11-12 year old grade six students who collectively produced a short film. The girls' activities were videotaped transcribed and eventually analysed using conversation analysis following the method of Tiefenhermemeutik (depth hermeneutics) designed to analyze unconscious subtexts in conversations. Hackmann analysed patterns of social relationships, topics chosen, styles of

[29] This was replicated in my own project where the effect of the televisual (reality TV, "Gotcha" style interviewing techniques, and even the subtext of *The Breakfast Club*) had a profound effect on the girl's films. Bloustien's insights were generally supported throughout this project, and repetition is often an indicator of a "truth".

speech, and interactive patterns, but her analysis of the text was especially useful as a model for my own project in relation to analyzing the film texts.[30]

Her insights into the choices of voices, culture and connections between heterosexual culture and violence were profound, as were her observations on the films depictions of heterosexuality and its effects on the ideal of beauty. She also gives a prime example of the dichotomy between "normative reflexivity" where the girls follow the accepted "normative" behaviour of heterosexuality and mediature, where the norm is challenged and negotiated:

> "On the one hand the girls fall back on social pictures: e.g. the prevailing norm of heterosexuality; on the other hand, the girls reinterpret these pictures and use them for living out norm-deviating fantasies" (p. 68)

Her study also gives insight into how to act in the dual role of instructor to the students and researcher, particularly the relative ease at which she slips in and out of role, actually taking on the role of 'villain' (i.e. she plays the kidnapper in her student's film). She then used their insistence that the kidnapper be a male into a "teachable moment" to discuss the topic of gender (though she found that due to the underlying heterosexual subtext of the students' film, this point was non-negotiable). She also discusses how the methodology of conversational analysis are: "helpful in reflecting on one's own involvement in the constructions and reconstructions of social reality" (p. 77), important in any study of reflexivity.

Hackmann also explores the notion of fan culture in this study, and how it is an exploratory practice, that has the function of maintaining relationships within existing groups

[30] Perhaps the reason for this is that the narrative the girls produced was fictional, leading to more complex subtexts allowing for deeper psycho-analysis of the texts.

(essential in teen culture) and as a marker of development: "girls associate being a fan with reaching a certain developmental stage at which one's position within the peer group and relationship towards members of the other sex are negotiated" (p. 73). The importance of fan culture and gender are further discussed in this chapter in the section on Jenkins' work, but Hackmann's discussion is extremely useful as a template to analysis of student films.

The final section of Hackmann's chapter concerns the application of this work to classrooms. In it Hackmann discusses the relevance of time, both from the perspective of the students (participation in the working group) and that of the teacher (spending too much time negotiating the script, reducing time for the technical aspects of the film). Time management and weighting of priorities is always an issue in education, and can dictate both the level of involvement/engagement and quality of production. These are issues that must always take the forefront in any study and/or discussion of classroom media productions.

Hackmann ends the section with suggestions of how schools can become a place for girls to become aware of their own bodies. She warns that time and space define these practices. She also discusses the role of the educator in these practices and the challenges of "striking a happy medium between imposing her own concept of a 'good, successful' life on the girls and concealing these concepts from them" (p. 77), always an important issue for students.

Another essential work into the study of girls producing film in the classroom is Mary Kearney's *Girls Make Media* (2006). She begins with research into the gendered disparity in media production and the depiction of women in media. She then discusses the history of girl's media production beginning with the sixties, evolving to the Riot Grrlls and some very enlightening exploration of girls' film production.

Like many others, Kearny advocates teaching media before media production, but seems to advocate an "inoculation" approach to media literacy[31] while simultaneously observing that girls already posses insights into media creation (Zines). True, the inoculation approach does give students the vocabulary needed, but it can leave students jaded and suspicious of all forms of media[32]. Perhaps what is needed is a balance of appreciation for media as well as a critical eye towards it. Kearney finds it important to "recognize stereotypes in media and differentiate between those stereotypes and their own lives" (p. 93), but although many students are able to recognize and differentiate, they seem at times incapable or unwilling to internalizing that knowledge, whether they are aware of the stereotypes or not. As one of my grade seven students commented when presented with a series of presentation by her classmates about propaganda techniques: "I know all this stuff and I don't care."

When the Media-Literacy movement began, a defensive posture was necessary and served an important function, but it has been reduced to a cliché: anti-corporate media-literacy has been co-opted by the mass media itself in an attempt to sell "cool," a phenomenon covered at length in Heath's *Rebel Sell* (2004). Anti-ad ads such as Sprite's Charles Barkley commercials in the late nineties are quickly were quickly recognized as such by media savvy teens (Rushkoff, 1999). Perhaps it is time to move away from an emphasis on protection to one of knowledge since the 'protection from the dark arts' approach leads one to become one's own critic when one begins to produce, potentially creating a 'cognitive dissonance' within prosumers.

[31] In the 1930's, radio was vying with newsprint as the dominant mass media, and as a result for the first time in history, technology allowed information from foreign powers to cross boarders un-hindered by physical barriers. The need for a counter to this threat led to the first modern application of the "Inoculation" approach to media education (Masterman, 1997), thus engendering the notion that media awareness was not unlike preventing disease. The term inoculation is drawn from the public health practice of giving shots to prevent serious diseases (Pfau, et al., 1990). Although the British were the first to embrace this technique, the Americans added the Disney touch *(Education for Death;* Disney, 1943), and in 1951, Marshall McLuhan added to this sense of moral panic with his doctorial dissertation *The Mechanical Bride where he* pointed out that domestic corporate entities were manipulating the public through mass media. McLuhan analyzed how advertising was used to manipulate and control not only buying habits, but the very notion of what was important to buy.

[32] A paradox if we ask them to produce media.

Kearney's most important contributions to this project is found in her methodology (outlined in the section on web design), her investigations of girls' production, and her discussions of the environments that they function in. Having girls produce is a lot more important than critiquing ads that often self-parody; you can't beat them to the punch, they critique themselves. In creating their own works, even with very little formal discussion on the topic, girls can see the obvious: when they themselves sit down to create their own ads can they really begin to understand how the manipulation works.

In Kearney's chapters on girls' production of video (She Shoots, Reel Grrrls, and Grrrl Action), she discusses girls' production workshops and other hands-on, pro-active approaches to literary criticism. Until girls can pick up a camera and create their own vision of reality, they are often merely spouting back what the teacher said in class. Kearney advocates letting girls pick up a camera and explore the editing software to come up with their own stories, not succumbing to Masterman's notion of "fourth rate productions" (1985) that occurs when students attempt to imitate existing genres.

One of her most disturbing findings was that "boys tend to outnumber girls in owning their own film or video cameras" (p: 191), and Kearney lends insights into a self-perpetuating feature of the problem when she cites Andrea Richard's claim that girls don't think of filmmaking as an option, "because it's so off limits through cultural and gender stereotypes." (p. 192), citing hegemony relying on sexual division of labour which puts females at a disadvantage. It is reminiscent of Holloway and Valentines's discovery of the "we can/I can't" mentality that girls avoid certain behaviours, reminiscent of Bloustien's own experience with film choices.

In her chapter "Developing the girl's gaze," Kearney succinctly outlines many of the issues essential to this project: economics, the heavy weight of film and video cameras prior to

1990 playing a factor, stereo-typing, sexism in the industry, historical patriarchy, the fact that the majority of the men working in the industry are male while quoting Amy Heckering (*Cluless*), Randa Haines (*Children of a Lesser God*), Susan Seidelman (*Desperately Seeking Susan*), and Jodie Foster to stress her point. She draws attention to the eighteen to thirty-four-year-old male demographics as steering the choice of types of films being made ('boy's films') versus "women's films," and points out that the situation is not much better in the Indie scene as well as in armature filmmaking, pointing out that men still posses an edge in the use of electronic technology but that the gap between male and female use of electronic technology is narrowing.

Essential is her exposition of the fact that though film production is taught in U.S. high schools, most youths interested in film making start out on their own or with friends, and boys meet with support from family members while girls often meet with resistance. She discusses classrooms with disproportionate numbers of males in classes and male teachers and advocates single sexed classrooms, which introduces an interesting paradox that develops with the notion of single sex education: girls don't need boys and do better without them.

Boys need girls to teach them how to negotiate, to keep them on track, and make sure their productions have content. Give a group of boys a camera and it routinely turns to slapstick that is bound to bore everyone in the audience except those who made the film. It is difficult to disagree with Kearney on these issues since all of her arguments are valid: girls do more without boys, and girls let boys run everything and/or exert power via sexuality (i.e. flirting).[33]

She ends on a promising note, discussing girls' "historical lack of interest, confidence and participation in making and recording music" (p. 300), discussing Misty McElroy's Rock 'n Roll camp for girls in 2000 as a prime example that girls can become motivated and interested in

[33] Kearney's arguments are well grounded but coming from a Catholic education in the 1960's when gender segregation was the norm, I cannot help but feel that this is a step ***backwards***, that might perpetuate gender mythology, stereotyping, gendered divisions of labour, etc.

the right environment (again, all girls' spaces) and cites the creation of several other, similar ventures. She concludes the book by reminding us that in spite of the existing disparities in film and TV production, there is a rise in girls' involvement which gives us hope:

> "The growth of girls' media since the early 1990's indicates that a considerable number o contemporary female youth have the confidence to stand up, speak out and be publically present in ways that most women of my generation can only marvel at and envy." (p 306)

Conclusion

The aim of this chapter was to give an overview of existing research of girls, women and media, offering an historical survey of where we are. Each of the authors has contributed to the study either of how girls produce or background into how to study such a complex issue. The fact that women are under-represented in media production is irrefutable but the ramifications of such an imbalance is more difficult to measure since it is so ingrained into our present society.

It is clear that the phenomenon or gender disparity in media has been recognized and the authors cited have offered several suggestions at rectifying the situation: Donna Haraway pointed to the door and announced that is the time for women to rejoin the ranks of those participating in the production of technology, avowing it is time to stop telling "what we already know" and engage young women in media production. Kearney concurs but suggests "girls only" environments, but as Gill point out, this will not prepare them for the eventuality of having to deal with men when they get into the workplace, leaving "the mainstream intact and unchanged."

Jenkins infers that the transition is already taking place with the advent of fan sites and other women's spaces, but there is no guarantee that these sites would simply become marginalized.

I offer another suggestion in this thesis: educational reform, one where media production becomes part of the curriculum so that every girl will have the opportunity to create media before they leave high school. It already exists: a social experiment taking place in Quebec could serve as a model for others in how to make media production as routine as text production. We sit on the precipice of a media revolution not seen since the Guttenberg press and there has never been a better opportunity to change the way women perceive themselves as media producers then the changes in curriculum provided by the Ministry of Education in Quebec and their most recent educational reform. My study is a depiction of a modest witness conducting an experiment in a classroom in order to learn how girls produce media.

CHAPTER III: Methodology

Grounded Theory

The last chapter considered research surrounding the study of girls and media production I have borrowed elements from a number of researchers working in the area of girls and media and production, but the overarching methodology within which I locate my study is Grounded Theory.[34] Grounded theory involves the collection and analysis of data before the creation of a working hypothesis (Haig, 1995) which seemed to me to be the most appropriate approach to seeking an answer to why girls do well in high school media production, but show little interest in media production as a career. At this time there are few theories on which to build, and some research on women in media production (Orwin and Carageorge, 2001) has been rendered as 'dated' due to the impressive strides made in micro-circuitry, resulting in incredibly light weight cameras (Van Winkle, 2009).[35]

The most recent works on this topic as noted in the previous chapter by Kearney, (2006) and Bloustien (2003) are very useful, based on ethnographic methodology, and they are emergent in nature. Grounded theory does not attempt to validate existing theories: "grounded theory methods are now the most influential and widely used modes of carrying out qualitative research when generating theory is the researcher's principal aim" (Strauss and Corbin, 1997).

[34] Does the use of grounded theory imply a positivist stance? I do not believe it does: Grounded theory is often seen as being a reaction against positivism (Kinach, 1995) and philosophy should not dictate which technique is used. I advocate an eclectic approach to methodology and refuse to be bogged down by semantic jousting, here and in the media-hyphen debate.

[35] In 2001, Orwin and Carageorge discussed how only men could lug around heavy equipment, but by the end of this decade, electronic news-gathering (ENG) camera systems have shrunk in both size and weight so that the unquestionable need for men to handle the equipment has become moot. At that time, one of the lighter cameras (Ikegami HDK-79EX) weighed over four kilos (10.9 pounds) but by 2007, the Canon XH G1S HDV Camcorder weighs half that at 4.9 pounds (HD Camera guide, 2009). Although not commonly used by professionals, newer camcorders weigh in at 300 to 400 grams and get the job done (Van Winkle, 2009).

The entire notion of media production in high school has gone through such rapid transformation in the past ten years, from a "tech voc" option just for boys, to being considered a separate competency in the English Language Arts classroom (Quebec, 2004). Thus, we are free to observe a transformation without precedent and attempt to generate new theories to explain a new phenomenon.

Another reason to select grounded theory is that it is based on the principle that "truth" and "reality" cannot be confined to a laboratory, specifically when studying human behaviour (Anderson and Arsenault, 1998). Often the constraints of formulating a study using the traditional scientific approach focusing on creating a question that can be measured statistically is so binding that the researchers are forced to do intellectual arabesques in order to make the question fit the tools, and as Bloustien so eloquently stated: "the perceived need to 'scientifically objectify the focus of the inquiry can lead to an obfuscation of the studied" (2003, p. 44). Reality often does not allow itself to be measured in such ways and grounded theory is more pragmatic in certain situations. This is best summed up by David Weber (2007) who observes: "reality consists of the experiences of the actors in the research study and the researcher's goal is to describe their experiences as accurately as possible while looking for patterns in the data collected" (p; 63). The actors in this case are teen-age girls in a secondary school classroom, who create media in contexts no longer constrained by previous notions of media technology and ICT, and which involved tools where size and weight may have made gender an issue (Orwin and Carageorge, 2001; Kearney, 2006).

Grounded theory has been adapted from its original use in Sociology to be used in most other social sciences including education (Strauss and Corbin, 1997). Grounded theory is, "a theory of scientific method concerned with the generation, elaboration, and validation of social

science theory" (Haig, 1995). Grounded theory begins with the observation of a particular phenomenon which is worth examining. In this case, the phenomenon is girls doing well at media production in high school and yet rarely choosing to pursue media production as a career. In this case, I began to collect possible explanations of why girls do so well at media production and asked them if they were interested in continuing in the field.

In grounded theory, researchers gather data, and then see how theory can emerge from the data (Haig, 1995). In the case of grounded theory, researchers decide which tools might be best for the study. In this case, I decided that the best tools would be an analysis of the girls' productions and then the use of work surrounding the productions, such as their journals, storyboards, and interviews. To begin with, the texts that the students created were analyzed using a reflective lens: interviews with the students themselves on possibilities for future employment in the field would add valuable insights into their motivations and perspectives (Dick, 2005). Data collection consisted of close readings, observation, interviews, informal conversations and discussions, and field notes, all key elements in grounded research (Dick, 2005). Comparison is essential to this process so I began comparing interviews and other data sources to discover key issues indicated by a series of codes. I began to observe how students were managing their roles and as similarities and patterns began to emerge, they were coded as outlined by Dick (2005) and Weber (2007).

Once recognized, codes can be compared to existing theories to find concepts. In grounded theory all information is relevant and existing theories are referenced in order to develop new theories (Dick, 2005), unlike traditional research where data not contributing to existing theories is discarded or ignored. I kept all field notes and read and re-read them until patterns began to emerge.

It is important to note that grounded theories acknowledge the fact that observations are unique in time. Since society and technology are in a constant state of flux, the situation that girls are now experiencing in the high school classroom is unique to this point in time. It did not exist ten years ago and will not exist ten years hence. If we recall Johnson's (2006) theory of co-creation, technology shapes society, but society creates technology to suit its needs. Since women/girls are seen as a large part of consumer culture, then we might expect that technology will be built to respond to this consumer group.

Theories of human behaviour need constant upgrading, especially theories of education that were prevalent in the 1960s and 1970s and even the 1980s that did not take into account the proliferation of media and the overwhelming effect it would have on student culture. Marshall McLuhan's (1967) metaphor of the "rear view mirror" has never seemed so relevant: we constantly strive to create new materials to teach media literacy to teens when they should be teaching it to us. We cannot build upon outdated theories that cannot keep up with the exponential proliferation of communication technology. We must observe reality as it occurs since the conditions that existed to create the situation cease to be observable. When it comes to technology and learning "Truth" is ephemeral.

These "truths" are relative since the truth about media experienced while learning about media production in the late 1970s no longer exists; I see the advantages of digital video editing since I worked with analogue. The students in this study take the technology for granted. We, as teachers, always look through the rear view mirror, seeing what was (when we were students), but these girls' "truth" consists of light weight cameras, drag and drop programming, and quick playback of their works. Their truth involves media production that is simple and quick, and they assume it has always been so. These girls design, produce, and assess based on this reality.

Data Collection

Using "grounded theory" to establish a theory (not prove one) incorporates a cycle of data collection and analysis (Strauss and Corbin, 1997), and this study began with collecting surveys of students' (both boys' and girls') existing knowledge of media, followed by preliminary interviews, which allowed me to set a benchmark for students' prior knowledge of media production and to measure their interest in careers in production. (See Appendix C) As mentioned earlier, I compiled index cards of how the students responded and my anecdotal notes were the primary source of collecting data. These were sorted and then coded to find possible patterns that developed.

As part of the courses I was teaching (grade 7 and 8 English Language Arts (ELA), Grade 11 Technology), the students were then taught principles and techniques of film-making and eventually asked to create their first films, using stills, narration and music to create a "Ken Burn's" type documentary (a documentary film that uses only stills along with narration and ambient music to tell as story). Through time and with experience, the students were given more and more control of the film content, the results of which became part of what John Fiske (1987) refers to as the "Primary text," or their film productions.

Drawing on Fiske's method of textual analysis (1989), I conducted interviews with the girls and they also kept journals. This data represents Fiske's notion of "secondary texts," or "producer texts". These added structure and gave insights into their choices when making their films. Findings were then coded, and grouped into similar concepts which in turn formed categories. Categories generate theories which could then be researched and validated.

The interviews were conducted in front of a digital camera after the students had produced their first films. The interviews were conducted during the students' lunch period and at times other students or staff members could be seen or heard in the background, though this did not generally distract those interviewed.

Who are the producers?

Of the 157 students in my classes, seventeen students (a little over 10%) participated in the study. The thirteen girls and four boys in the study ranged in age from twelve to seventeen. Of the girls, seven were twelve to thirteen during the course of the study, one was thirteen and turned fourteen, and five were sixteen or older (Grade 11). The majority of the students from the study were representative of the general population of the school. The majority were born in Canada: three French Canadians (two of mixed English-French marriages), four of Scottish or British ancestry, five of Italian descent, one of Jewish background, and there was one Canadian born Greek student. There were two non-Canadian born students in the study, but due to the uniqueness of their ethnicity, any more information on those students would violate anonymity.

The original request for participants was made to the classes, with permission forms being given out to all students in each class. So as to not to suggest the nature of the study (Hawthorne and/or John Henry effect as outlined in Zdep and Irvine, 1970), the study was open to boys as well as girls, and thus four boys also participated, which made comparisons possible, and facilitated the examination of samples when mixed gender groups were formed. The boys were similar in demographics, with one French Canadian/Anglo mix, two Scottish/British mixed,

and one Indian born but (Canadian raised) child. Male participants were treated the same as female participants except that they were not interviewed.[36]

I must admit that there were far more participants in my field work than the seventeen noted above. The non-participants often joined in conversations with participating students, and in some cases, co-authored productions with them. Due to the nature of the classroom, it was impossible to isolate those who had signed consent forms from those who had not; they all participated in the film making activities together, regardless of whether they had signed release forms or not.

The school itself (identified in this study as "West Island School" to ensure anonymity) is located in the "West Island" region of Montreal, a predominantly middle-class Anglophone suburban neighbourhood with an average household income of $77,628 versus the Montreal average of $61,068 (Statistics Canada, 2008). According to the Montreal Economic Institute, the families represented in the school had a combined average household income of $129, 867 (Boyer and Laberge, 2008) making it significantly higher than the norm for that area which is higher than the Quebec average income (according to Statistics Canada, the average after tax income for a two-parent family with children in Quebec was $63, 237 in 2007). An interesting variable used in the study was the average education of mothers, considered by the Institute to be a major indicator in predicting student success. At "West Island High" the average mother's education was 14 years (compared to 12.8 for the province), higher than the norm and fully 1/3 or 33% of all inhabitants of the area (over age 25) had achieved a graduate degree or higher (Boyer and Laberge, 2008), much higher than the national average of 25% (Statistics Canada, 2009).

[36] In retrospect, this may have not been such a good idea, but this study was about girls and did not focus upon an investigation of gendered differences (that will come in later work).

This was a part of a potential confound that emerged near the end of the study in that all students participating in the study scored high academically (averaging 83% in all subjects, putting them at the top quartile of the school), and indicating that parental interest in academic study might be correlated with academic performance. As well, the higher level of mothers' education may have made the students' parents more aware of and/or sympathetic to educational studies and thus more likely to allow their children to participate in academic research. This would imply that these children were hard-working, grade-motivated students who came from a tradition of valuing teacher instruction and paying attention to directions.

The school has a rotating schedule so although the junior students were in a "core" course (English Language Arts); the senior students were part of a technology course and only saw the teacher four out of six days. The school year began in early September and ended in early June with the majority of data collection beginning in mid-October. This was due to the need to approach the school's Governing Board with my proposal and have it approved by them. Therefore, there was a six week hiatus between the beginning of the curriculum and the actual process of data collection.

The students in the study were not treated any differently from the rest of the class with the exception of the interviews. All activities (surveys, learning, film production, journals) were merely part of the curriculum, as they had been for at least three years before, so any possible Hawthorne effect was negated by the routine nature of the tasks. Although all were asked to participate, there were no references to the study, aside from the initial handing out of the permission forms, which were returned quietly by the students. Since the teacher (me) was also the researcher, the study for all intents and purposes was invisible, assuring as natural a setting as possible.

The survey

Filling in the first survey given out on the first day of class, most of the students indicated they had used Power Point in grade school but none had made films prior to the study (although several students who did not participate in the study indicated they had, but no follow-up could be initiated). All students in the study claimed to have access to computers at home, and five of the thirteen girls claimed to have computers in their bedroom. The school computers were Pentium 2 IBM clones of various makes and models, whereas the cameras used in the study were usually the student's own (school cameras were available, but most students had access to their own cameras). Findings will be discussed at length in Chapter Six.

Conducting the film-making project

Beginning in September of 2008, all students (participating and non-participating) were taught the theory and techniques of still photography to understand both the codes and conventions of reading and producing images, as well as teaching an appreciation and understanding of aesthetics and compositions. Students were taught the codes and conventions of storyboarding and encouraged to create storyboards before beginning in order to save on time. They were also taught video editing techniques using Microsoft's Movie Maker (available for free on all PCs thus allowing for work to be done at home), as well as tutorials in Adobe for manipulating images. As mentioned earlier, this was the normal curriculum for these courses and had been for the past three years.

All students began their film productions by using Microsoft's PhotoStory, which is designed specifically for creating videos from stills in the "Ken Burns" style. To acquaint the students with the program, students were required to create a series of short films (in class) of increasing complexity using the various features of the software including titling, voice-overs, zooms, pans, and transitions. Once the students had mastered the program, indicated by the completion of the five assignments, they were then given the specifications of the first film assignment (see figure six page 103).

One of the features of PhotoStory is that it allows the producer to zoom into or pan across an image to communicate a desired effect. By watching clips from movies that effectively used pans to convey distance, space, scope and grandeur of location as well as demonstrating how zooms could be use to focus the viewers attention on a specific place/person for effect, the students saw examples of how these techniques are used. Films shown as models were documentaries that showcase the use of stills in film including *Dogtown and Z-boys* and Ken Burns' *The War*.

The students' first term productions were rather simple. The junior grades were told to create a still image documentary explaining literary texts they were reading in English class (a selection based upon a theme of myths form around the world), in order to fulfill the QEP media competency. Senior grades were required to take the images themselves using digital cameras to capture their lives in the school and create a public service announcement for the school using PhotoStory (though two senior students in the study chose to create live action film instead). This project was also in line with the QEP cycle two (SELA2) competency for Production as well as competencies for Science and Technology.

The second term involved video making: the students learned more about storytelling with less focus on storyboarding, introducing the notion of movement film and positioning (mis-en-scene), and more lectures were given on various use of the camera, and more analysis of videos to see examples of what can be done with the camera. As was the case in Bloustien's (2003) study, the use of microphones to enhance sound quantity was not taught and their use was discouraged in order to make the filming as "authentic" as possible.[37]

Students were taught the codes and conventions of moving films as well as instruction on different genres, supplemented by watching examples of different genres (comedy, horror, action, etc.), and activities involving deconstructing the codes and conventions of the genres. Students were then given the opportunity to shoot their own videos. The older students were given the opportunity to depict their lives at the school while the younger students were asked to film a scene from a play they were doing in their English class (Shakespeare's *A Midsummer's Night Dream*).

All students were given a brief overview of how to use the cameras (though as mentioned earlier, many had access to their own) along with five short, in-class assignments on how to edit footage using Microsoft Movie Maker. As the classroom teacher/researcher, I circulated in the classroom to ensure students were familiar with the equipment and software, and the assignments were assessed with an eye on possible problems that specific students might have with those programs/software.

Once initial training had been completed, the students were told to do their actual shooting outside of class time, though the senior students did the majority of their filming in the school, and on occasion actually interviewed other students during the class time, the first of

[37] Most cameras come with "built in" microphones which capture all sounds thus taking away from the voice of the speakers, but microphones are intrusive and can be intimidating. It is a choice: spontaneity and freedom versus high quality sound.

many illustrations of reflexivity. This allowed for more independence for the students and class time was freed up to deal with editing footage and trouble-shooting. The students were given a deadline to complete filming two weeks before the project was due so that editing could be done in the classroom and assistance would be available by the teacher. At times, when a specific problem became common, the students would be given mini-lessons to deal with the specific issue or problem.

Senior students were given feedback on their initial production (mostly technical in nature), as were the juniors students (but they were given more structured, less complex tasks such as creating a documentary of a myth or producing an ad for a book). The film productions became much less structured by the second term since the students had received training during the first term and so had prior experience and would have developed problem solving skills. For the senior students, there was less stress put on storyboarding in the second term, so the projects might be more "authentic" given the new direction they had been given. For the older students, the final film would be "their" own voices, telling their own stories.

The Environmental Text

In addition to the primary texts (or the media productions themselves) and the producer texts (process data from the actual producers), I decided to include a third text that I call the environmental text. I have not seen a reference elsewhere to such a text in the context of media production, but it seemed to me that this is a critical textual component of work with youth where the productions could be youth-initiated (and outside school), youth-initiated but adult assisted in community based projects, and classroom-based (and to varying degrees youth

initiated) in more formal school projects such as this one. The environmental text is an important one in this study in that the classroom offers a unique context in relation to groupings, the affordances of the school in relationship to film production and so on. Since all schools are unique in how they present media to the students, an autoethnographic analysis (my own) of the location of the study can offer insights into the work that the girls produced and the choices they made. This will be discussed at length in the next chapter, as a third form of text.

Analytic Framework

A critical aspect of work in the area of media production is of course the challenge of finding an analytic framework. As noted earlier, Fiske's notion of primary texts and secondary texts provided a basis for working with the data in such a way that I could study the relations between and among the data sources. Fiske suggests that when studying cultural texts, we should distinguish between the different types of texts: primary texts, the actual films that the students created; the secondary texts which are the cultural texts which ordinarily include the products associated with the primary texts (publicity, talk-show interviews, fan sites, etc.) which in this study is manifested as the interviews with the students; and the third text which are "reader" texts, that normally relate to the readers' or audience reactions to the texts (letters, talk about the text, fan fiction and so on) which in this study is manifested in journals that the students produced after creating their texts.

Fiske (1987, 1989) describes how these various text types 'leak into each other,' demanding, in a sense, to be read together (Weber and Mitchell, 1995). In this case, as noted above, one text that could not be overlooked is the environmental text, which both shaped and

was shaped by the productions. The environment constrained and simultaneously inspired the girls' productions, and in turn was affected by them: when the girls began interviewing for their films, certain "private" spaces became public, and their activities with the camera altered the landscape of the school, redefining spaces so the school environment can be seen as both a secondary and a third text simultaneously.

In a sense, the interviewed were also the audience, and had a certain amount of input into the productions. Some of the girls in commenting on their productions stated that they had certain 'actors' or students being interviewed and that they evaded stating what the producer wanted them to say (the 'scene kid' and "the rocker" in "*The New Breakfast Club*"). This indicates that these students had a sense of how they, as a member of the audience would want to be depicted.[38]

Data sets

In all I worked with 29 video production texts, 17 survey forms, 24 sets of journals, and 8 transcripts of audio interviews from eight girls (I did not interview the boys since they were not the focus of my study). My approach was to first of all work with each data set separately. With the primary text videos, this meant viewing and reviewing them several times. As I went through these videos I followed the following process:

1. viewing the video as a whole

[38] The environment itself might even be seen as a *fourth* level of text, to be added to Fiske's existing three since school productions, unlike those made with large budgets, are constrained by the environment provided and thus the environment must be seen as a text contributing to the productions.

2. Looking closely at such features of film making as the following: genre, overall length, types of shots, music, scripting, and so on.

My approach to working with the survey forms was to simply tally up the results by age and gender and look for specific patterns to emerge, paying close attention to discrepancies between their answers on the survey as opposed to the answers to similar questions in the interviews. All students filled out the forms whether they were in the study or not, so there was no sense of being "singled out."

My approach to working with the journals was to have all students' complete journals as a normal part of the curriculum. The reflexive quality of a journal is part of the learning process, so there was nothing out of the ordinary in asking students to compose journals for a teacher. I then photocopied the journals of those involved in the study and transcribed them later. In many cases the students completed their work digitally, so I merely made a copy of the journal which ensured no errors in transcription. I then read the journals looking for any patterns to develop, and then re-read the journals several times over the next few months when new issues arose. Analysis of these journals led to some interesting insights that are discussed at length in Chapter Six.

Finally, the interviews each lasted approximately 6 - 8 minutes, and were held in the same classroom the students produced their media in. The interviews were filmed and later transcribed. The transcriptions were analysed to search for patterns and the actual films were also viewed and reviewed in a search for patterns to emerge.

Validity and Reliability

This study could fall under insider practitioner researcher in which I as the teacher conducted the study in my own media classroom, both in relation to carrying out the data collection, analysis and interpretation. Analysis of various texts aided in testing for validity and reliability, since the nature of grounded theory makes validity-testing part of the procedure. Ratcliff (1995) argues that measures for reliability in qualitative research include divergence from initial expectations, convergence with other sources of data, extensive quotations, other research data and independent checks, all of which are integral to the grounded theory approach.

Divergence from initial expectations tends to validate findings since it demonstrates that bias has not shaded the findings (countering the idea that if one is looking for a problem, one will tend to find what one is looking for). Various tools of investigation validate each other: the girls' survey answers tended to validate my observations and field notes, and their interviews tended to also validate their answers in the surveys (since they often concurred). Interviews were transcribed and surveys were categorized, ensuring validity of the girls' responses, and the categories were then studied and validated against existing research, all part of the method of grounded theory.

Triangulation as discussed by Guba and Lincoln (1994) offers alternative criteria for judging validity including credibility, transferability, dependability, and conformability in place of more traditional approaches to ensuring internal and external validity, reliability and objectivity. Triangulation refers to a situation "where researchers search for convergence among multiple and different sources of information to form themes or categories in a study" (Creswell and Miller, 2000). Additionally, Fiske's (1987, 1989) multiple levels of textuality add to the triangulation process.

Thus some of the methods of credibility used in this study include: triangulation, prolonged engagement in the field, researcher reflexivity and a thick, rich description in place of more traditional measures (Creswell and Miller, 2000). I did not use all of the methods outlined by Guba and Lincoln (1994) such as collaboration, since I feared this might give away the nature of the study and might have created a self-fulfilling prophecy (girls produce films differently than boys), but I did engage in prolonged engagement in the field, (close to eight months for this data collection) which led to the students disclosing information and 'giving back to the study.' Creswell and Miller also claim that being in the field for a prolonged period of time "solidifies evidence because researchers can check out the data and their hunches, and compare interview data with observational data" (p. 128), which proved vital in my data collection.

Creswell and Miller suggest that "another procedure for establishing credibility in a study is to describe the setting, the participants and the themes of this study in rich detail." (p. 128). I was limited to the themes and the setting since too rich detail on the participants might have violated my promise of anonymity, but I devote an entire chapter discussing the setting, a text in itself. Themes are well laid out in the review of the literature and the discussion of the films aid the reader to understand the context of the study and hence add credibility.

The researcher reflexivity is to be found through out this work where I attempt to report on my beliefs and biases and clearly state my position in the study, and "bracket or suspend those researcher biases as the study proceeds" (Creswell and Miller, 2000; p. 127). This can be found in my "situating myself in the study" and "my research" sections found in the introduction, as well as being bracketed throughout the study whenever needed. Thus this study is steeped in reflexivity and being a researcher/teacher, I come into this study pre-disposed to uncovering how girls produce media. As part of my reflexive stance, I also attempt to lay bare my assumptions

and reasons for the questions that I pose. Since my sense was that girls produce media differently from boys, I felt I had to traverse lightly between my role as researcher and teacher since one role cannot over-shadow the other, and so I constantly find myself apologizing when one role inhibits another (not being able to use collaboration lest it undermine my role as teacher).

Summary

The structure of this study is complex due to the nature of studying the classes one teaches. There are a myriad of levels of cause and effect interplaying in the school, affecting the psychology of the students and limiting the nature of the study. Aside from the nature of the students themselves, there is the location which is middle-class suburban to the core. Within that constraint there is the building itself and within that, the spaces where the study takes place.

In an effort to understand some of the elements affecting this study, it is important to view all forms of textuality, from the films themselves to the environment in which they took place. The next chapter is devoted to a description of the location and a discussion of how the environment is itself a text to be studied using Fiske's structure to frame the organization of the data chapters: Environmental Texts, Primary Texts and Producer Texts.

CHAPTER IV: The Environmental text

An autoethnographic depiction of the setting: Fifties architecture meets Second Millennium Female-Man

> "Scientific stories are not 'innocent'; they reflect, and cannot be decontextualized from surrounding events and institutional circumstances" Donna Haraway (1991: p. 106).

As noted in the previous chapter, the setting or environment as a text is important since most of the editing and almost all of the filming was done in or around the computer lab and adjoining halls where the students were offered the course. The setting effected the primary text, was part of the secondary, and at times, even a third text. Setting and time were two of the major contributors to the decisions cited by the students for choices made, and thus the environment itself might give insights into the productions that were created, and the mindset of the students who made them. Thus, in this chapter I provide what the socio-semiotician Stephen Riggins (1994) might term as an auto-ethnographic reading of a space. Riggins' in his work offers an auto-ethnographic reading of his parents' living-room, noting the denotative (factual/historical) and connotative (personal and narrative) features of this space. Mitchell and Reid-Walsh (2002) adapt Riggins' work in their analysis of the middle-class child read through the lens of babies' bedrooms. Here I offer a denotative reading of the functionalist architecture of the school where the fieldwork took place, along with a connotative reading which offers an entry point into considering some of the meanings attached to the girls' hallway productions.

Hallway sites

Simply the fact that this is a middle class high school in a middle class neighbourhood in Quebec necessitates that all productions will be primarily white, western, and middle-class in appearance, although as Cherland (as cited in Mitchell and Red Walsh, 2005) points out, this can have some hopeful possibilities: "I find hope in young girls' appropriation of middle class technologies for their own subversive purposes and their reconstruction of 'middle class subjectivity' as socially responsible." (p. 110). Creating a film (at least in terms of access) is still primarily a middle-class endeavour, and it stands to reason that the representations will be of their stories, their lives, reflecting their existence.

The school environment makes its stamp on most of the productions for the simple reason that students have been asked to depict their life in school. They will choose locations that represent their existence, some private spaces, some public, some within the very class that they were assigned the task. Where the students chose to film may also give insights to how they perceive these spaces, how they use them, and how they appropriate these spaces in an attempt to take control of the spaces that they represent. The fact is that many school- based texts representing the lives of students will have the same basic look due to the constraints of shooting within the confines of the school. In the case of the "baby boomer" school where these productions took place, there is a particular look. Indeed, the "Hallway Productions" use their schools as a setting due to the fact that the cameras cannot be removed from the schools and/or the students are reluctant to use their own time (after school) to create productions.

This phenomenon is especially pronounced in this project because the students had been asked to depict "life at the school" as the film prompt. In fact most films made in schools in

Quebec would have a very similar feel since there has been only one English medium high school built in Quebec in the past twenty-five years. The majority are of the same architecture (or older), and the majority were built between 1959 (the first public high school in Quebec) and 1979 (waning of the baby boom).

The setting is the entire school but an adapted classroom serves as the epicentre and the surrounding halls serve as the nexus. The school of 1250 students is set in a middle-class suburban neighbourhood and completed in 1960. It is a product of the "functionalistic fifties" movement of architecture. The school is typical of schools built during the baby-boom in Montreal (or anywhere elsewhere in Quebec at the time): a series of classrooms on either side of hallways allows natural light to enter the classroom both through windows found in each class as well as through large windows on the doors of the classroom and a string of frosted windows found at the top of the inside wall.

To avoid an incredibly long, narrow building, and to create a healing/cooling effect, the building folds over on itself, creating two courtyards which are used primarily for parking but also serve as gathering points for students. This design also allows for teachers to be able to monitor classes across the courtyard from the classrooms in a manner described by Foucault's in his notion of the "panopticon," (1995) where a single guard can see many "prisoners" but remains unseen. This situation is duplicated in both the cafeteria and gym where surrounding windows make it possible for teachers to observe students discretely, adding to the institutional feel and the fact that all spaces are "public".

Although completed in 1960, construction on the school was obviously started in the 1950's and has the look and feel of the "functionalist fifties" when pragmatism overshadowed aesthetics in the building of institutions. Functionalism, at least in architecture, is the principle

that the design of a building should be based on the purpose of that building. Louis Sullivan popularized the phrase 'form ever follows function' to capture his belief that a building's size, massing, and other characteristics would be dictated by the function of the building (Manieri-Elia, 1996). The implication is that if the functional aspects are satisfied, architectural beauty would naturally and necessarily follow. In my opinion (and as one who has to live on a daily basis in this space), I would say they were wrong. More so, in attempting to create a "high tech" showcase of a computer lab, the room itself becomes a metaphor for trying to integrate twenty-first century technology into a nineteenth century school system which is itself based upon the notion of "institution" where schools, prisons, and asylums suffer pretty much the same design.

Dropped into the middle of a late-fifties and early sixties suburban housing development, the school itself has the overall form of a capital "H" (as seen from an aerial view) which was originally designed to create a separate space for girls and boys (the gym is the connecting space). Each wing is approximately 200 meters in length and the gym is approximately 100 x 50 meters leaving fifty meters of each wing to extend beyond the superstructure. These are the hallways so prominent in many of the students' films. The media studies classroom itself (See "class" on figure 1) is in the middle of the north-east wing which was originally in the "Girls" wing (since renamed the "Laurier" wing) back in the days of gender segregation in Catholic schools. Therefore the girls' bathroom resides in this hallway. There are staircases at each end of the hall, though the western staircase only

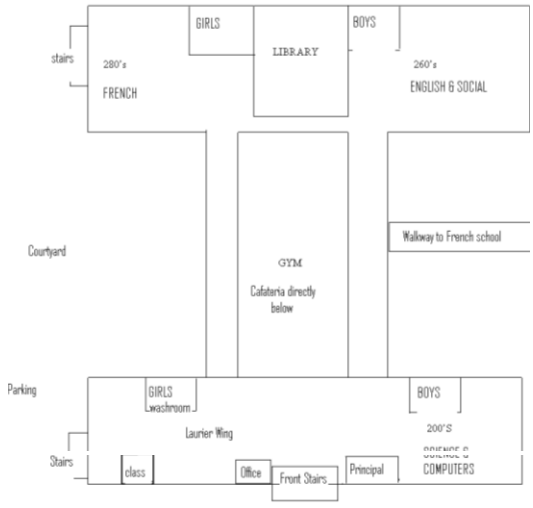

Figure 1 – Map of West Island high

goes from the ground floor to the second floor, rendering it more isolated. On the opposite end, a glass portico separates the hallway from the offices and front entrance.

The majority of classes in this wing are used for teaching either Math or Social Sciences, with a girls' washroom at the entry of the wing, a "public/private" space that is featured in more than one of the girls' films. There are five classrooms in the hall (the seventh space is taken by the girls' washroom and across from that is a teachers' common room with kitchen which makes up the eighth space). Each classroom in that hallway is approximately 33 x 44 feet in size and the media classroom is typical of that design. There are exceptions that are slightly larger or slightly smaller, where of course form meets function (for example, the north-west wing only has four, much larger classrooms to facilitate chemistry labs).

The interior of the room has one northern wall where windows take up approximately 50% of that wall's space (metal heaters reside beneath). Across from it, the south wall has a series of narrow, glazed rectangular windows that allow in light (and noise) from the hall, a common element found in many pre-1960 edifices. These windows can be opened inward for ventilation, though many have been painted shut for decades. The inner window frames are the originals, so they actually allow for a notion of what the exterior windows once looked like: thick, wooden rectangular frames with a two inch square metal locking device that is opened and closed by a large metal ring jutting from the lock. These windows were considered modern in their time, replacing the traditional "guillotine" windows that dominated both the domestic and institutional landscape for hundreds of years. Without any ropes to break (making them inoperable), they seem arcane when compared with the sleek sliding aluminum windows across the room.

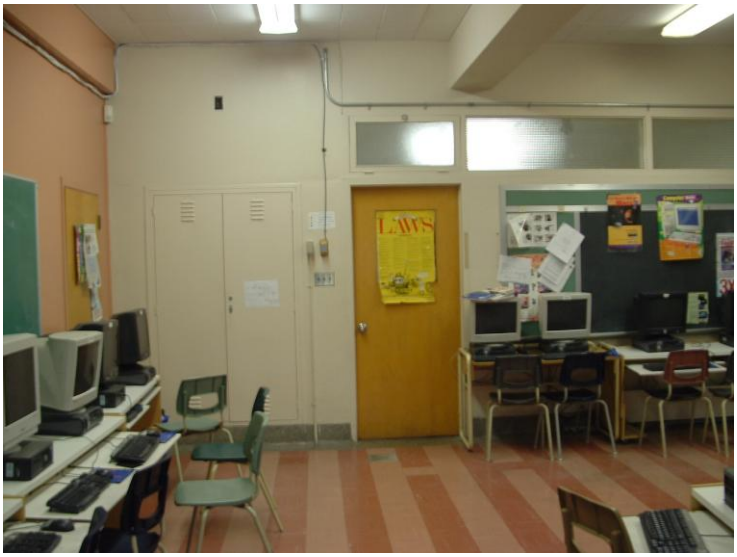

Figure 2 – Southern view of technology classroom

The door itself also provides a window to the hallway though recently, due to recent fears of school shootings, all windows have been surreptitiously covered by posters ("Laws of Computing" poster seen on the door) to prevent the possibilities of intruders peering in. The door and the teacher's desk are heavy and sturdy, made of the same light coloured (probably stained, definitely varnished) Maplewood. They are two of the five items in the room that actually match the date of the building (the interior windows, the doors, the desk, the locker, and the blackboard). Beside the door stands a metal locker that is used for storage of speakers, and other spare parts, and it is surprisingly well constructed. It would take virtual demolition to open this door without a key. The floor and lights are the other vestiges of the actual era that the building was constructed.

The floor is tiled with a linear pattern of pink with white specks interspersed with white tiles with pink specks. This turns out to be a good choice since it hides dirt and scuffing well. The color is rather unobtrusive, better suited as camouflage than for aesthetic purposes. As in many buildings of the era, the tiles are made of asbestos but we were told that this is not a problem unless they come lose and/or are broken which releases the asbestoses fibre (the first tile came up in March 2009). It also makes it very easy to measure the floor since the squares are conveniently exactly one square foot (another tool of the functionalist fifties?).

The fluorescent lights are another throw back to the fifties and were recently retrofitted with newer, cleaner covers that mimic the original opaque plastic covers that existed before (the only difference is the fact that the old cover had yellowed with age and many were either cracked or in some cases missing pieces). The light is institutionalized, preparing the students to work under the stale lighting of office buildings yet to become part of their working lives.

Except for these last remaining vestiges of the late fifties/early sixties, the rest of the room is a hodgepodge. For example , a poor attempt to falsely convey a message of newness led to windows that were recently renovated, replacing the original thick wooden windows that opened diagonally outward (not unlike an oven door) by a double narrow sliding aluminum design that was standard on most houses built since the 1970s in Montreal. Thus they lack the high tech feel that the room strives to create. Second to that is the fact that the windows seem much more domestic than institutional in their orientation, seeming quite frail compared to the original double glazed wooden windows. They belong in a residential home that can not afford to upgrade to PVC windows yet, and not what one would expect in a high-tech showroom.

Adding to the faux modernity are the blinds which are the newest renovation (2008) that have an almost ultra modern appearance to them (some sort of thick but flexible polyurethane that that appears metallic, but touch reveals their true nature). They roll up and down using a metal cord which adds to the deceptive metallic illusion, the only sign that they were chosen for robustness rather than aesthetics. The blinds are perforated but do a good job of keeping the sun out with, opening and closing with very little noise. Still they are strangely out of place.

The ceiling is another renovation, a product of the early seventies preoccupation with insulating sound while serving the secondary function of hiding peeling paint. The ceiling is covered with perforated clapboard tiles, painted white, common to institutional buildings of the

seventies before the more popular "suspended ceilings" came into vogue. There are actually rooms in the school that did not receive this treatment and we see that these tiles were merely glued on to the existing ceiling mainly for sound insulation. This is part of the hodgepodge of eras that make up this room, architectural relics from the 1950s, 60s and 70s. The 1980s initially seem conspicuously absent from the mix until you consider that the chairs are vintage 1980s' plastic-on-metal frame institutional chairs, while the 1990s are represented by the blinds.

Figure 3 – Western view of the classroom

There is very little in the way of personality coming through in artefacts since this institution frowns on using thumb tacks or nails that might damage the paint and tape or mac-tac are not effective, particularly on hot summer days. For this reason, the door separating the two classes (which can be thumb-tacked) serves as a bulletin board. There are chalkboards on two of the walls which are bordered by a soft, green pressboard, very conducive to thumbtacks. This would explain why the majority of posters hang from above the chalkboard. The chalkboard is framed by aluminium, again an attempt to create the illusion of "high tech" to a low tech room. It adds to the metaphor of new wine in old wineskins.

Subtly renovating the room's way to the classroom of the future is not enough for the needs of the machines in it. A large metal electrical conduit juts through the walls with aluminium pipes protruding and stretching out in seven directions. This metal octopus make it clear that the room was built before the need for large amounts of power (the room was built

with only two separate electrical 110 outlets), since the room is now used as a computer lab. Not only do electrical conduits and LAN cables cover the walls in a communist-era motif of having utility fixtures on the outside for easy access, but a dark gray electrical panel accentuates the point, dominating the west landscape of the room, making no pretence of its function. "This room is electrified," it screams, adding a 1990's Cyberpunk motif to the room. This aspect of the architecture is probably the most honest aspect of the room: function over-rides form, fitting considering the rooms functionalist fifties origins.

Another electrical innovation appears in the form of an air-conditioner, added not so much for the comfort of the students, but rather to cool down the computers. We were specifically told this when they were installed. The air conditioners, like the windows, seem more domestic than institutional: they are rather small units that sit embedded in two of the windows. Due to the domestic nature of the units, one does not suffice. High out of reach of playful students, they turn on and off by a remote hidden away in the vintage desk, although if one were to stand on the window sill, it is possible to control the unit manually.

The arrangement of the desks is for utility rather than aesthetics or personal taste. The electrical wiring and network cables are affixed to the walls so the majority of the computers sit on tables (that roll), two to a table along the walls. There is one exception: a metallic "jiffy pole" that descends from the roof in the middle of the floor allows for an "island" in the middle of the room. Although originally housing four computers, two are in disrepair and there exists no money to replace them.

Counter-balancing the octopus of electrical conduits converging on the fuse box are two 4 x 8 plywood sheets that have been painted white in a desperate attempt to create a screen (the irony is when the workmen came to put it up, the teacher using the room protested vehemently

since he had been very successful in projecting on the white wall up until that point). There has been an attempt to distract from these monoliths by inserting posters on the remaining section of the wall, but the inability to use nails has led to the majority of the posters falling to the floor --,and occasionally upon unsuspecting students.

The projector itself is small, five inches high, sixteen inches wide and eighteen inches long, almost invisible on the teacher's desk. It sits rather unceremoniously on a cardboard box on a table that otherwise serves for students to pick up handouts for the course. The box sits on an Ikea style armoire that like the other twelve in the room, easily rolls across the room on castors. The box and the piece of furniture does an adept job of hiding the teachers quasi-antique (circa Dick and Jane era) desk, a feeble attempt to feed the illusion of modernity, adding to the high tech façade. Ironically it is the computers themselves that destroy any illusion of this being a "high tech" room.

Figure 4 – Northern view of the classroom

At the heart of the room, its mechanical soul, are the sleek black computers that are crushed by the weight of monstrous monitors of many makes. The most conspicuous sign that this room is not high tech are the screens themselves. With the advent of the flat screen revolution, the monitors are about as high tech as black and white TVs from the 1950s. Not only are they huge and thus take up an inordinate amount of room, there are at least ten different shades of white, grey and black, in sizes ranging from fifteen to nineteen inches. Often in disrepair, the quality differences between the monitors are even more glaring.

Attempts at personalizing the environment range from tacking newspaper articles on the impromptu bulletin board that used to be a door connecting this room to the most easterly room to hanging posters. The bulletin board that had been provided by so cleverly embedding it into the chalk board (yet another attempt at false modernity) is so small that mandatory notices of fire drill procedures and escape routes covered it long ago. Posters are another attempt at humanizing the environment. A large 22" x 48" yellow poster ("Murphy's Laws of Computing") listing comic excuses that are associated with failure in ICT surreptitiously covers the window of the door while two smaller, older laminated posters from government organizations point out the advantages of using the Internet while beside them a newer poster depicts the dangers of the Internet.

The first "dangers of the Internet" poster is grim: in three tones (black, white and dark blue) a young girl hangs her head in shame in front of a computer screen. At the top of the poster the caption reads "He told me he wouldn't show anyone" and the bottom caption states "Child porn is a crime: report it." Another poster form the same series hangs over the teacher's desk. It is starker, merely a black and blue image of a damaged Teddy bear with the same caption ("Child porn is a crime: report it") below the bear. Two larger (32" x 26") more colourful posters that belong in a primary school class are strategically positioned with one on the east wall tacked to the frame of the blackboard and it discusses how to read a web site. Another is taped precariously with duct tape on a pillar just to the left of the teacher's desk. It speaks of "Netiquette," and instructs how to write an E-mail.

The final attempt at adding personality to the room is the poster between the fuse box and the improvised screen. It is from a yearbook company (one class produces the school yearbook) instructing the reader to make sure that each student in the school is in the yearbook three times.

Figure 5 – Western View with fuse box and screen

The last electronic artefact affixed to the wall is a new intercom, a white box to the left of the fuse box. It also has wires leading to it from a hole drilled into the wall, the final reminder that technology has been imported into the room since the original intercom still resides a few feet away. Wires hang from the ceiling and run along the walls in various directions until they violently pierce through those same walls via makeshift holes cut with the subtlety that only a pneumatic drill can provide.

The teacher's desk, the other relic from the 1950s, is well hidden, masked by the IKEA tables the students use. Its power and organic quality stands in stark contrast to the slipshod nature of the students' desks. The desk has been there for fifty years and will probably be there for another fifty. It is a separation of teacher from student, a clear delineation of power and yet is downplayed, surrounded by the cheaper, weaker tables that the computers sit on. They roll, but the teacher's desk must be moved with force, for the desk is thick maple as opposed to the Ikea tables that are thin and made of melamine, pressed woodchips covered with Arborite (another throwback to the 1950s).

One last piece of furniture remains to discuss. In the north-west corner, beneath the screen stands a four drawer drab-olive metal filing cabinet that is timeless. It is a design that has lasted a hundred years; it might have been constructed in 1975 or 1935. There is no way to know.

The lock has been torn out so metal hoops have been welded to the bottom and the top of the face of the cabinet. A long rusty metal pole goes through the hoops so the cabinet can be locked. Amongst the façade of high tech, another testament to the reality of the school system stand on guard, filled with folders containing the work of students that has been printed so it might be graded in a traditional manner -- pen and ink.

What meaning does the environmental text have?

In the section above I have tried to ‘map out’ in as detailed a way as possible the physical space in which the fieldwork took place. There are a variety of interpretations that one might give to this space in relation to the girls’ hallway media productions. This is the environment` these girls will learn about and produce films, modest witnesses of the third millennium. The use of various façades may partially affect some of the films created, particularly the attempts at replicating “televisual” reality in the form of interviews that are as contrived as the décor. Like the pattern of the floor tiles, manipulated to hide the truth rather than expose it, like the room itself where pretence is the prescribed décor. This classroom and the surrounding halls provided the location that shaped and constrained these girls’ films, and their naive attempts at reflexivity. This is the environment that is their reality, the place where their observations affect the very situations they are observing, and transform it into the televisual.

The physical setting is often featured in the students’ films. For example, the notion of the lab as a "private/public" space is depicted in several of the students’ films when interviews take place. In two of the films, the lab is a setting for the girls’ interviews, considering it a "private" space for conversation yet they are surrounded by other students who seem impervious

to the interviews. This is a reflection of the private/public dichotomy that is found in all of the students’ films when exploring "hallway culture": the school is a public space that has private spaces that are appropriated by the students to suit their needs. Most teachers have experienced being shut out of these spaces, even within their own classrooms! Students’ appropriation of spaces is exemplified by "Angela": in her "Breakfast Club" film: she personally appropriates the most spaces within the school, including the classroom and the girls’ bathroom across the hall.

This appropriation of space is a constant struggle between students and teachers, where certain teachers seeing students’ attempts at appropriation as a threat will attempt to return the space to a "public" space by entering the space and asserting their authority. This may take on several forms: asking the students to change their behaviour ("don’t sit on the floor") or removing them from the space entirely ("you can't be here"). It is the same power struggle played out by Zapatistas in Mexico and revolutionaries throughout the world: those in power (in this case the teachers) attempt to withhold resources from those not in power (the students). Since it is impossible to constantly monitor these spaces, the "owners" of spaces create structures and rules to assert their authority/ownership. However, the role of "the others" is to subvert these rules and attempt to wrestle control of these spaces from the owners. In that way, the universal struggle for power is played out in school and although not directly depicted in the students’ films, the search for space is (Anita’s wandering through space, Cleo’s tour, Linda’s visiting space after hours). In one of Julia’s journals, she records being told to leave a space by a teacher: *“Some teachers didn’t even let us do it; they said it was prohibited to take pictures in the hallways and stuff like that, also we wanted our pictures and filming people to be unexpected.”* For this reason, the students often retreated to "safe" spaces where control is freely given to them or can be taken without challenge: the classroom and nearby stairwell, and the girls’ washroom.

The classroom is depicted as a hub of activity, but often the students are left to depict the rest of the school in a variety of ways. For example, at the end of the hallway, there are a set of stairs down to the next floor scarcely fifteen feet away from the door of the class. This space is found in more than one student’s film, primarily for quiet interviews. Since it is relatively isolated, it allows for a temporary sense of privacy. I am reminded that this is considered a students' "private" space every morning upon entering the school when groups of students congregate there to discuss private matters. When I enter their space, the tone becomes subdued and conversation often stops. In some cases they will playfully mimic discussion of academic matters in campy tones "so what do you think about the theory of relativity?” This space might be considered an extension of the classroom due to its physical proximity and the fact it is considered even by teachers to be a students space, a periphery rarely used by teachers who prefer to use the stairs left of the girls’ washroom.

The girls’ washroom is also featured in at least two of the girls’ films, one of the truly “private” spaces the girls have in the school (female teachers rarely use the students’ washrooms having a newly renovated one in the teachers lounge across the hall). The use of the girls’ washroom will be discussed further in Chapters Five and Six, but it is interesting to note that these three public/private spaces, along with the hall that connects them, seem to make up the classroom, extending outside of the boundaries of the classroom depicted earlier.

There are forms of ‘moral’ or surveillance spaces where the girls might have filmed because they were being watched by the principal, or the other teachers. This space is the front entrance to the school which is features in many of the girls’ films. It is interesting, because this access to the school is a point of contention since students are told not to use these doors except after regular school hours, to wait to be picked up after extra-curricular activities. This entrance

is a focal point of the school's architecture and is bordered by the Principal's office to the left and the Senior Vice-principal's office on the right. It is an institutional "public" space that is kept for parents and visitors' entrance. The only reason students would be there would be to report in late or to receive absent slips or other official forms. The only other reason a student might be there is for a disciplinary reason, so it seemed interesting that it was so often featured in the girls' films (none of the boys in the study featured the space). Use of the stairs before closing hours is strictly forbidden and teachers routinely make students attempting to enter the building through these doors walk around to the side doors. Indeed it is a space where power and control are regularly exerted.

It might be that the students were thrilled with the prospect of having a legitimate reason to be there, taking on an adult role or it might have been to be surveyed by teachers and administrators participating in classroom activities.[39] Whether any students seriously located themselves in that space to be monitored by teachers or principals is never brought up. It is possible that they located themselves there to be viewed by other students as having acquired a status that allowed them to circumvent the rules. It must also be exciting to be in a space usually reserved for official or punitive purposes on your own terms, being able to use the "forbidden" stairs in the day time in sight of teacher show might otherwise "deport" the students out of the supposedly public space.

It is interesting to note that boys rarely filmed in school, choosing to do most of their filming outside of school grounds (although there was one group of senior boys not in the study who did film in the school). Settings included such places as a park, a street, and a studio. Why is it that when asked to create films about life in the school that boys chose to make films outside

[39] This was both a blessing and a curse for me as I was complimented by some for having such an interesting activity in my curriculum while others admonished me for allowing students to "roam the halls" while making films.

the school? Is it due to the fact that their social life revolves around activities outside or that they simply don't find what goes on inside of interest? Could it be due to the fact that negotiation played a central role in appropriation of spaces to make the films, and perhaps the boys preferred to either film after school when there was no need to negotiate? Could it be an illustration of the boy's street culture (Livingston, 2002), a space they would rather be?

Even in the junior grades, much work was done at home, leading to a situation where some male students were off-task in class and claimed that work was "at home" or that they had finished at home (which was validated by a completed film). In the space of the classroom, boys were much more likely to be off task when editing, with boys' often dispersing to work on separate computers whereas girls crowded around a single computer to work as a group.[40] The tightly packed space of the classroom made working at the same computer difficult at best and led to stereotypical heterosexual grouping patterns. When working together, girls seemed more comfortable working in tight spaces while the boys had clear lines between them. For the boys, this might have something to do with fear of being labelled gay, so personal space was well delimitated. For girls, close physical proximity is acceptable without bringing in questions of sexuality. In mixed groups (only found in juniors), closer physical proximity was observed, and in at least one group, girl-boy proximity bordered on the inappropriate with "coupling" of boys and girls sharing the same seat, at times sitting on each other laps. This would make for an interesting study in the future and it would be interesting to measure if physical proximity when editing affected the films, but this is outside of the limits of this study.

[40] I did code this and in the beginning of coding, I thought this might be worth investigating, but found that girls', boys' and mixed groups all varied in whether they worked collaboratively or divided the work and worked separately regardless of sex. It seemed who was in the group had more of an effect on division of labor than gender.

Summary

In this chapter I have mapped out what could be regarded as an additional textual space in an overall textual analysis of film making. I call this ‘the environmental text’ and in so doing see that it is a critical space to be considered in youth-generated work. Given that more schools are integrating video production into their curriculum, this hallway culture" may well become more and more prevalent in students’ production either due to necessity or choice. As mentioned earlier, this could be seen as an additional text type complementing Fiske's method of analysis, and one that we cannot afford to overlook since the environmental text will affect the production texts as well as the secondary texts and the entire concept of private versus public spaces.

Chapter Five: The Production Texts

This chapter is divided into two main sections: in the first section an analysis of the films produced in the first term, and the second section reviews what transpired in the second term, when students had more freedom to make decisions about their productions. In the first section, I focus on the first films produced, analyzing gendered differences in techniques and practices of film production. I also make a comparison of products by age, noting different practices both in production and in grouping choices. In general, most of the analysis focuses upon the junior students where gender comparison was possible (no boys in the senior group consented to be in the study). In the second section of this chapter, I focus on the senior girl students and their productions, with special attention given to the nature of reflexivity. In so doing, I try to situate the need for a greater focus on understanding the importance of reflexivity when studying girls as media producers.

Assessment and rubric

At the beginning of their production, the students received the following rubric as to help guide their work since it outlines what is expected for the technical aspects of the film. This is based on normative codes and conventions of film.

	Incomplete	Developing	Accomplished		Elaborated
Titling	On one slide only – default font used.	Default font used. or changed font for no particular reason. Titling may be inappropriate/haphazard	Used more than one time. Font choices show some thought. Title hidden by panning.	Font type, color and *placement* are deliberately chosen for a desired effect. Placement of titling is deliberate and well though out.	Font choices are artistic and add to the comprehension of the video.
Voice Over	Video uses Voice-over inappropriately. There are some technical problems (volume to high, too low).	Voice over may distract rather than enhance the video quality. It is obvious that the script is not rehearsed.	Video uses voice on at least three separate occasions with no technical problems.	Voice over is used appropriately throughout the video. Script is well thought out and obviously rehearsed.	Voice over is polished and adds a great deal to the product. Student used more than one voice (e.g. interviews others as well)
Music	Music used inappropriately (chooses songs that do not match images). There are some technical problems.	Video uses 1 music file with no technical problems, though music may distract rather than enhance the video quality.	With minor exceptions, all elements contribute rather than distracts from the videos overall effectiveness.	Video uses 2 or more music files as well as voice effectively. Music is well chosen and adds to the mood of the product.	Music is used in creative and effective ways that exploit the particular strength of video. All elements make a contribution.
Image Quality	Poor Quality (Pixilated).	Some pictures are of poor quality or have little to do with the story. Variance in image quality distracts.	All images are of reasonable size and are appropriate. Red eye or other problems are not corrected	Images are of high quality and are well chosen to convey the author's message.	Images are of extremely high quality so all pans, zoom ins seem professional.
Image Choice	Choice of images is haphazard, with little thought to conveying message,	Image choice is generally appropriate, but more than one image seems an afterthought.	All images add to the message of the product.	Every image is essential to message.	Images are powerful and thought provoking.
Effects	Uses zoom or pan ineffectively.	Uses zooms and pans effectively on occasion.	Continually uses pans and zooms effectively.	Pans and zooms are well thought out and add to message and/or mood.	Use of pans and zooms is near professional.
Transitions	Transitions sloppy or non existant. Most transitions are sloppy or not well thought out	Transitions show some effort, but at times seem unplanned.	Cuts well thought out and executed. But specific effects but are overused	Cuts well thought out and executed and add to the overall effectiveness of the scene.	Editing is near professional.
Communication	Message is vague or unclear.	Message is obvious but cliché. There is little regard for codes and conventions (clip too long, etc.)	Communication is effective, but emotive elements are overdone.	Message is clear and original.	Message is clear and original. There is effective use of codes and conventions of documentaries.

Figure 6 - Rubric for assessment of video

Gender and age differences

Secondary I and II (roughly equivalent to Grade 7 and Grade 8) students were limited to creating films based upon their readings from their English classes, while Secondary V (grade 11) students were given free reign to explore actual school life and thus free to explore the subject matter firsthand. The students were told to create a short PSA for the school using stills that they took. There were some interesting variations in the older students' productions, but what stood out were notable differences between the productions of the girls' and boys' films: in general, the girls followed the specifications more closely and thus created films that followed the criteria outlined by the teacher and which reflected the codes and conventions of film. This disparity seemed to increase with age: junior boys' films were much closer to the specifications but the senior boys' works generally lacked one or more of the requirements specific to the codes and conventions typically associated with film.

I originally saw the first films as a training exercise, merely an attempt to create a knowledge base of film itself as well as the techniques involved in video editing (much more difficult and time consuming than filming or photographing content) in order to provide the students with the background they need to produce.[41] Photographing and/or filming is both time consuming and presents its own set of problems, so junior students were permitted to use pictures from the Internet which saved them time and allowed them to focus on the editing. I did find some interesting differences between the way girls and boys produce films aside from the fact that girls followed the specifications better.[42]

[41] At this point, I was in my "teacher" position as opposed to my "researcher" role.

[42] The phenomenon of girls doing a better job following directions had been my experience for the past ten years and says more about girls' socialization practices than production abilities.

The students were required to create a storyboard first, lest the tail wag the dog. In my experience, students first learning photo-editing software often find images first and then awkwardly attempt to have the narrative fit the images. Storyboarding facilitated the students' understanding of terms like "angle", "zoom," "pans", the use of music, and other codes and conventions associated with film production. Judging by the videos produced (at least those produced by younger students), the students seemed to have understood the basic codes and conventions of film, but used them differently depending on gender and age.

Grouping of students was self-selected, based upon personal preferences which led to girls-only groups, boys-only groups, and a few mixed sex groups. This partially allowed students to transcend the male dominance of film production in schools as outlined by Kearney (2006, p. 205-207), since girls-only groups did allow freedom from male influences, and even in the mixed sex groups, the students were young enough to be oblivious of the "boys' club" mentality usually associated with film production in high schools (Kearney, 2006)[43]. It is interesting to note that in the grade eleven class, all groups self-segregated by sex.

One of the more interesting findings coming out of the first film assignment revolved around the use of the technical features of the software. In analysing the productions submitted, I found that girls spent significantly longer time on a single zoom or pan (8 to 11 seconds on average) to accentuate the subject, while boys' use of zooms and pans were quicker (6- 8 seconds), which created an illusion of movement in the stills. Both groups had been taught the same technique, but how they used them was quite different. In particular, there were two films in a grade seven class where one girls' group created a narrative of the story of Persephone while another pair of boys depicted the same story from the view of Hades. This we had two sides to

[43] In some cases of mixed grouping, girls dominate the groups, taking charge and delegating tasks to the boys. In other cases, the boys and girls seemed to share all work equally.

the same story from different perspectives, but both groups were almost identical in the use of longer pans and zooms until the end when the boys' film speeds up while the girls' film slows down. This might be demonstrating a focus by girls on the subject while the boys are more preoccupied with moving the plot along.

In the younger students' productions, the girls' groups generally tended to reuse certain images, a quality not found in the boys' productions. For example, in the girls' film of Persephone, they reused an image of the gods three times, once to introduce the concept, once to focus on Hades, and one more time to focus on Persephone. They also used another image of Persephone twice, about a minute apart. This was not always mentioned or justified in the girls' journals, although in one case "Joanne" discusses this choice in her interview. She claimed that the group wanted the character to remain consistent since there were many variations of the character to be found on the Internet and they didn't want to confuse the audience with several variations of the same character. Although this was not found in all girls' productions, it did demonstrate an awareness of target audience (empathy): the students had anticipated confusion in the viewers of the film, demonstrating a greater awareness of how the film might be viewed.

The notion of target audience had been mentioned several times in other aspects of the course, but had not been directly addressed (i.e. it was not a "requirement" of the production). Was the girls' mentioning the needs of the audience due to a sense that it was required or were they simply worried about the stranger's gaze and aware that the films would be viewed by their peers? Were they simply predicting confusion on the part of their classmates? Is this another indication of differences in empathy by sex? If we use the definition of empathy as the ability to accurately infer the specific content of another persons thoughts and feelings, there is a body of evidence (Ickes, 1997) supporting the concept that woman do exhibit more sense of

understanding others (although more traditional notions of empathy and "women's intuition" are not supported). Another possibility is that the girls themselves were confused and so projected these notions on their peers, but this was not indicated during interviews or through journals.

Another difference in the first films was marked by age: the students in the junior grades more closely replicated what they had seen in TV documentaries, while the senior students' works more closely resembled a PowerPoint slide show, a program that they had had prior experience with. The younger students' lack of prior knowledge left them with no pre-conceptions to imitate save TV, so generally their work more resembled TV documentaries.

The girls' films were on average longer than the boys' (4 minutes and 31 seconds for the girls versus 3 minutes and 50 seconds for the boys'), and although both sexes used the same number of images on average, due to the speed of zooms and pans, the girls' films lasted longer (mixed sex group productions tended to be about the same length of the girls only films).

The girls' groups and the mixed sex groups were also more likely to have completed all of the technical aspects of the film (sound track, narrations, credits, etc.), ensuring higher grades, while boys generally neglected one or more of the criteria outlined through the rubric (see Figure six page 103) explained at the beginning of the project, though this may be more indicative of compliance and girls' attempts at pleasing others, a phenomenon covered in depth by Worell (2001), Susskind (2007), Powlishta (1995), Absi-Semaan (1993), Ullian (1984), and Keyes (1984). The notion is summed up best by Fletcher's (2006) who contends that boys write to amuse other boys while girls write to please the teacher. The girls did as much as they could to produce their films following the criteria asked for, while the boys' works were often technically incomplete, and narrations were often "camped up" which led to laughter when the class viewed

the films later. There were also attempts by mixed groups to amuse, but it was less frequent and generally, mixed groups followed the criteria as well as did the girls' groups.

The same trend occurred in the senior students' first films: boys were either not engaged or produced narratives meant to amuse the other students with loud, often inappropriate music and staged snapshots (the specified target audience was parents of potential students), while the girls' films tended to be nostalgic with sentimental music and candid pictures.

The films of the secondary II students followed the same pattern of non-compliance by boys, although at least one of the boys' productions followed the criteria quite rigorously, and that group consistently created films that exhibited the codes and conventions normally associated with film although in one of their films the content was fraught with errors. The film was on World War II but they made glaring errors including the date of the start of the war, the date of the American entrance to the war, and included images from the first and second Gulf Wars. This demonstrated a negative correlation[44] between age and performance in the boys: in the Secondary I (Grade seven) classes, the majority of boys' productions fulfilled all requirements; in Secondary II, there were just two boys-only groups (most of the groups were mixed sex groups), but both of these groups produced films using all of the codes and conventions. By grade 11, all of the groups were segregated by sex and only one of the six boys-only group productions fulfilled all the technical requirements of the film. By the second film, two of the boys-only groups had all of the requirements.

The phenomenon of girls seeming to be more compliant than boys is common in North America and Worell (2001) cites several studies in the *Encyclopaedia of Women and Gender: Sex Similarities and Differences* giving examples from 12 cultures in the U.S. She asserts that, "because of ongoing socialization, boys tended to be less sensitive to the needs of others than

[44] N size too small to be considered

girls" (Worell, 2001; p. 806), so it should come as no surprise that the girls fare better when asked to produce films using a specific criteria. The girls were more sensitive to the demands of a teacher. Maybe they thought I would be slighted if they didn't comply whereas the boys would be less likely to consider that as a possible outcome of not complying and focus more on the grades which were generally discounted since Technology is not a "core" course and thus not necessary for graduation. A consideration of compliance, of course, is a tricky issue. On the one hand then, the girls' inclusion of all of the features of film-making asked for may be read as compliance. On the other hand, the fact that all of the conventions required tend to make for a better product may mean that they were more interested in the success of the final product.

Set backs and breakthroughs

As the year progressed, the students in all classes were given more freedom and ownership of their films. Senior students were no longer limited to the public service announcement format, which gave then the freedom to use whatever format they chose while junior students were asked to film a scene from a play they were studying (*Midsummer's Night Dream*). The original intention was for them to create a group film of their experiences, and the earlier films to serve merely as practice. However, the second film (which introduced them to filming and editing video instead of still images) seemed to seriously bog them down: they were supposed to complete the films before Winter Break (in March), but many requested an extension to work on the films over the holidays. When they returned from the break, many were still experiencing problems and needed support for a variety of technical issues. More time was given, but by the end of term, two groups were still not finished in spite of major efforts on the

part of the groups members. When we began the next term, I could sense a general fatigue and apathy towards media production.

By the beginning of the third term, I decided that it was in the junior students' best interest to scale back expectations, so they were not asked create a film representing their experiences. Instead, to help them regain their confidence as film producers, they were asked to create a "book trailer" (short video ad) for a book they read that term,[45] being allowed to use images from the Internet, which they were all very successful at. The lack of a production of a more personal nature affects the study, but it would have been unethical to push the students simply for the purposes of generating data for the study. This was my first serious foray into personal reflexivity in terms of the design of the study: my teacher/researcher position was poised to create a negative loop between what I was researching and what was happening in the classes, which in turn would seriously affect the study. This, coupled with ethical concerns which the teacher/researcher had not anticipated, made the pursuit of the juniors' films untenable.

Of course every researcher has to question what s/he is doing and how the research will be affected by her or his values and beliefs (personal reflexivity). If the teacher/researcher values media production as a form of empowerment, this will color the research. The fact that I was the researcher as well as the teacher could alter the course of the research and the findings (this happened more than once). In this case, the ethical considerations were more relevant since continuing as planned would have been both selfish and unethical. My role as a teacher over-rode my role as a researcher and I found the well-being of my students as more important than

[45] The students were reading in Literary Circles so there was a list of ten Young Adult novels they could choose from.

sticking to the original plan. I left my role as researcher and focused on that of teacher so the next film was simply to restore their confidence as producers.

The reality I was trying to capture in the study had become marred by the study itself. Practicing had tired the younger students, so they would now perceive media as something unpleasant, a chore. This created a reflexive question: how could the students' perception of media production affect the study itself? I began to ponder at length this question before a new question of reflexivity arose. Again my role as teacher and researcher were at odds. To continue the study as originally planned would tax my younger students and could inadvertently cause both girls and boys to conceive of media production as unpleasant, which would of course affect their productions. It would also interfere with my professional judgement as a teacher which at this moment was to back off and give my students some much needed rest.

Senior Students' Reflexive Phenomenon

By December, an interesting phenomenon began to take place in the senior class. Given the task of creating a film depicting school life, the majority of the girls had decided to create films that would depict their life at the school itself and chose unanimously to create "reality based" documentaries. They themselves become reflective since they participated in the depictions of reality they created. This created a loop within a loop whereby the study was the reflection of a reflection, with the observer/observed interacting at various levels.

Thirteen of the sixteen girls in the class (most were not part of the study) used a reflexive or at least a "reality based" technique. Two of the other three girls (not in the study) created

narratives, while one other girl did not submit a film at all claiming technical problems.[46] At the onset, several girls had written script for narratives, but within two weeks, thirteen of the female students had chosen to do interviews. Five of these were participating directly in the study, and in the remainder of the chapter I focus on their productions: *The Grad Shindig, What are you going to miss,* and *This is West Island High*. Unfortunately "Angela" did not give her film a title, but it seems to be a tribute to John Hughes' 1985 film *The Breakfast Club,* so I will refer to it as *The New Breakfast Club*.

The "reality approach" phenomenon was noted and coded using the grounded theory approach as outlined by (2005) and Glaser (1995), and as this trend emerged I began to investigate literature related to the phenomenon of the interview and the reflexive lens. This research led to the investigation of work by Denzin (2002) and Willig (2001), discussions of anthropological film techniques by Rouch (2003) and Ruby (2000), a sociological approach to the discussion of participant/observer by Hagedorn (1980), and finally research into the source of the girls' films, reality TV via Cultural Studies found on various articles including the Journal *Cultural Studies: Issue 2* (1995) and articles by Grossberg (1995).

In drawing on this work, I began to see that the girls were naively creating a form of reflexive production, stumbling across it in a manner not unlike that depicted by Piaget in early childhood development, "fortuitous combinations," whereby a child discovers some "rule" or "truth," while playing (Piaget, 1951), "no longer merely using acquired activities, but building up new combinations that are which are ludic from the start" (p. 115). Since these students were in essence "playing" with film, they were quite unintentionally creating work worth attention while "writing their way to meaning." (Bull, 1986) The girls were attempting to portray their

[46] Not all girls seem to be compliant: there were those students who discounted the course in the same way many of the boys did.

existence by asking questions to their peers about what they perceived to be "good" or "bad" about life in their high school.

Some girls conducted a form of ethnographic research dependant on the opinions of others, an opportunity to discuss what was occurring in the school with peers, a form of validation of their own opinions and beliefs. Other girls' work alluded to a form of ethnography, but their productions more closely resembled reality TV where "reality" is scripted and the realms of fact and fiction became blurred. This was the largest discrepancy: students who portrayed their reality objectively, those who created a narrative using interviews, and those who came into the film with pre-conceived ideas or agendas they wanted validated, not unlike those commonly seen on news or magazine reports. As observed by Bloustien (2003), the role that popular culture plays in productions is inexorable and so it should not be a surprise that the sites of production were inextricably tied to popular culture.

In spite of their differing approaches, it is interesting that the girls overwhelmingly chose the interview as a method of telling their stories. When they were asked to justify their choices in journals and interviews (see next chapter), the students were either unaware (at least at a conscious level) that their films were reflexive in nature, and/or admitted that many of their choices were based on spur of the moment improvisations, forced upon them due to time constraints and/or technological limitations. In my opinion, their true inspiration came more from their own TV sets, in the dialogic world that is reality TV, a topic I did not cover in class.

The reflexivity they exhibited might be considered what Grossberg (1995) termed "normative reflexivity" based upon norms and group relations, slightly different from the way Bourdieu first explained the term. The term *Normative Reflexivity* (according to these scholars) refers to a nexus of media and personal interactions that help shape the students' perceptions of

themselves, their environment and each other. The girls in the study, "analyzed their relations with peers, teachers, describing their own ethical norms" (1995; p. 324). This form of normative reflexivity is also similarly discussed by Thomas Johansson in *The transformation of Sexuality* (2007), but as mentioned earlier, Pierre Bourdieu and others (1993) depict "Normative Reflexivity*"* as more closely related to media and the media-culture loop or "mediature" loop discussed earlier, rather than Grossberg's more intimate form. However, in this case, both media and group relations come into play, so the form of reflexivity practiced by these students demonstrates qualities discussed by Grossberg (1995).

Analysis of Senior Girls' Videos (Primary Text): Second Hand Worlds

> "Subjectivity can take very different forms, however, and some of these may aid knowledge formation. Self-reflexivity on the part of reporters and presenters enables better understanding of the discursive constitution of their account and dispels the myth of objectivity whereas a more egotistical presentation of the investigating self encourages an absorption in personality that is more akin to celebrity adulation." (Macdonald, 2003)

In grounded theory, information generates theories. What became clear in this project was the unique manner in which senior female students represented themselves, and portrayed their realities, their "representations of womanhood." The first pattern that generated a theory was that of the reflexivity of the girls' productions: generally, the girls saw themselves through the lens of investigative reporters or documentary film makers. Although in the learning process (i.e. their first films) there were many experiments in film making, the second film was an

accommodation of their knowledge and experiences that culminated in the notion of portraying their own lives through film (self-referencing). The content of their primary text (the films) took on the nature of a secondary text in the form of interviews of other students, leading to the emergence of a theory that when teenage girls are given the opportunity to speak of their lives at school, they do so reflexively. Finding this initial pattern in the data, I began to review more work on the nature of intersubjectivity and the related notion of reflexivity in both Film Studies and in Gender Studies.

Students were exposed to many genres as they learned how to create film, but the interview (a small part of a discussion in a single class on documentaries), generally (but not always) in the form of reality TV (not covered at all), was their preferred genre. This should have come as no surprise since they were reflecting the society in which they live, the reflexive society, the "second hand world" described by Norman K. Denzin (2002), where the interview is the manner by which they believe holds the "truth" of their realities. As Ruby observes:

> ". . . culture is manifested through visible symbols embedded in gestures, ceremonies, rituals and artefacts situated in constructed and natural environments, culture is conceived of as manifesting itself is scripts, with plots involving actors and actresses with lines, costumes, props and settings. The cultural self is the sum of the scenarios in which one participates." (Ruby, 2000; p. ix)

The interviews produced by the senior students in their films represent the "scripts" and "ceremonies" that they live and interestingly enough, the interview prevails as the dominant ceremony depicted by female students at this school. All senior students were given free reign to

choose whatever genre they chose, but the interview was the ritual they most identified with and replicated in their films. It speaks volumes of the culture in which the students live and although they were not attempting to be anthropologists, they inadvertently began to be so when they tried to depict their lives.

Although they almost all chose the interview genre, the diversity of the type of interview varied from the anthropological cinéma vérité to investigative reporting (though not the "gotcha" type), to reality TV "real life stories," with varying levels along the script/reality continuum. Many could be classified as a form of "New Journalism" as defined by Tom Wolf (1973), typified by devices such as conversational speech in a first-person point of view, recording everyday details, and telling the story using scenes to get "inside the head" of a character, asking the interviewed what they were thinking or how they felt.

Most of the female students appeared to become naive anthropologists in their productions. A view of their lives in a school (who they really are), was depicted through the genre of the interview, unlike the boys who created fictional narratives. The interview is the technique that unites the girls' pieces, and for this reason, the most fitting form to analyze these productions is an anthropological one as outlined by Denizin (2002) Rouch (2003), and Ruby (2000).

The boys' films were radically different with no interviewing, but rather scripted depictions of humorous classroom situations. The only exception to this pattern was one male student (not in the study) who created a music video, depicting his life as a sort of suburban high school gangster. Although the nature of the study (life in school) lends itself to an anthropological study, the boys decided fiction was more interesting than fact.

Beginning with a discussion of Rouch's work, we might consider the students' films as a naive form of cinéma vérité. Rouch explains that cinéma vérité (film truth) is "an ambiguous or self-contradictory expression since, fundamentally, film truncates, accelerates, and slows down actions thus distorting the truth . . . cinéma vérité is a precise term and it designates not 'pure truth' but the particular truth of the recorded images and sounds – a filmic truth (Rouch, 2003; p. 13). With the advent of "new media" and micro circuitry, the techniques pioneered in the 1960s in France and Canada (Rouch, 2003) are taken for granted by these students who do not see them as techniques, but rather arrived upon them through trial and error (Piaget's "fortuitous combinations"). Over the course of making their films they observed their own reality and attempted to depict their lives, truncating and in some cases simultaneously slowing it down and speeding it up.

"Stella" – *The Grad Shindig*

Stella created an interesting version of cinéma vérité, a documentary of the "Grad shindig", a ritual held every year by the graduating class as a prelude to the Prom. Held in the school in late October, it takes place after hours and only the grads (the Secondary V students) can attend. It is an opportunity for the girls to show off their Prom dresses and serves as a dry run of the actual prom. It was a perfect opportunity for the producer to explore "representations of womanhood", but since this was never stipulated, and she had a limited amount of time to depict the event, she leaves womanhood out of the equation (though it still exists in the fact that the vast majority of those interviewed are women), in an attempt to truncate an entire evening into a three minute documentary. She not only sped up the process by reducing an entire evening (and all

activities leading up to the event) into just over three minutes, but she literally truncated some of the footage of those interviewed, cutting off subjects in mid-sentence as a sense of urgency is manifest in the work.

The speed of the piece is further accelerated by the speed of delivery: the narrator seems to be racing through the piece which inadvertently adds to the whirlwind sense of the event, giving us an adolescent' gaze of the event. It is here the creator of this film does such a good job of creating a "filmic truth" and depicts the event as having great energy and speed. The fact she is making a film of the event gives it power, making it into an "event" rather than just another school dance, and an anthropological study of a ritual of womanhood in this school second only to the Prom in importance.

Figure 7 – Dance Scene

The film begins with titling that splits off in two directions immediately, with driving techno music playing in the background, competing fiercely with the narrator's manic voice over:

"Welcome to the Annual "West Island High" Grad Shindig, an annual dance which is only open to the students of West Island High. This Halloween dance is the first Grad event venue. Several other events follow during the year that we will keep you posted about."

The next shot is of the actual dance, which is generally dark but punctuated by the sounds and lights of the dance, in a style reminiscent of how a film-maker in the sixties might depict a drug trip (*Midnight Cowboy, Easy Rider*) though these films were not covered in class.

We are then abruptly pulled out of the dance to witness the first interview, a record of a discussion with one of the teacher's involved. The narrator's manic tempo is finally brought to a screeching halt by the slow pace of the teacher's response. During this interview the interviewer asks typical questions concerning what went into the making of the event:

Interviewer (off-screen): "What did you have to do in order to organize this wonderful event?"

Interviewed (stands awkwardly with her hands behind her back: "I didn't do very much. It was mostly the . . . uh … students that took care of organizing the events. I just basically called for students to get involved and they . . . uh . . . they did what they had to do. (pauses) They did not disappoint (nods head).

But here, the interviewer then begins to question a decision made to not allow outsiders to the event, barely allowing the teacher to finish:

Interviewer: Why is it that Grads were not allowed to bring guests to this event"

As the interviewee responded, the interviewer quickly dismissed her, cutting off the teacher to ask another, less intrusive question of how much time went into organizing the event, which might have been random, or might be an attempt to downplay the importance of the "not allowed to bring guests" question. The interview cuts abruptly before the teacher can finish.

Interviewed: ". . . about twenty hours when you consider what went into the event, uh, yes"
Interviewer: "OK, thank you."

There is barely a second before the interviewer thanks the teacher, all part of the manic speed found throughout the film. We quickly return to the lights and music and the film is slowed down somewhat to give us time to actually focus on a few choice actors in the filmic reality before the hand held camera techniques loses focus and wanders through the ritual once more creating a sense of urgency.

We are then quickly transported to a second interview with another teacher who is introduced using a typical news style caption (absent from the first interview where the teacher was verbally introduced by the interviewer), but after one question, he is cut off in mid-sentence and we return to the manic footage of the dance. Whether deliberate or not, the cut fits the mood of revelry and speed associated with the event being documented, but the contrast between the conventions of the introduction of the interviewed and then his abrupt departure from the piece is striking and all at once fitting. It is almost as if the interview is truncated to bring us a news flash.

A bright pink caption queries "The Jonas Brothers?" which fills the screen in reference to the Karaoke scene that we witness, but in this scene there is a fascinating example of media convergence and media culture: as the camera attempts to capture the singers, it is blocked by a forest of cell-phone cameras being used to capture the same event. In a scene that a generation ago would be reserved for politicians and movie starts, this can take place in a high school setting with participants recording with lightweight digital equipment. The scene is captured, cameras capturing cameras, recording an event and yet the film maker herself does not acknowledge the irony of the shot since she is only one of many who are capturing the event (does a goldfish know it is in a bowl?).

The singers are spurred on by the attention of the producers, hamming it up for the cameras. It is another example of reflexivity where the term "participant observer" has taken on new meaning and in this micro-digital world. As the camera becomes less obtrusive, it allows the event to take place more naturally: no one seems aware they are being filmed since camera-phones are more common place in this culture than traditional cameras (and far less distracting due to the lack of need for a flash), but in this case, the singers are spurred on by the attention to create this impromptu show.

We leave the paparazzi on the dance floor and are immediately assaulted by a cartoon call-out label "the students" (in contrast to the earlier interviews of teacher) and a rough jump cut. We now see a shift in the film from anthropological to scripted TV.

The interviews so far have been realistic and generally followed the codes and conventions of reportage, but suddenly the film producer switches genres and we are thrust into a series of scripted (or at least rehearsed) responses to the question "what did you think of the Grad Shindig?" The first response with the obligatory, "it was awesome" exclaimed by a young girl in a close up, followed by a far shot of a second girl who repeats, "it was awesome!" The next shot is a girl in another hallway (the causeway to the French school) reiterates "I was awesome" and punctuates her comment with a cartwheel. The next shot is two girls who claim: "it was sick" in perfect unison followed by a staccato of positive shots with similar claims that pick up speed and seem more genuine and unscripted then the first two.

This fast paced depiction of reality is abruptly reduced to a crawl by a jump cut to two awkward teen-age girls facing the screen who are asked by the narrator "what did you guys do in order to organize this event?" Their names are not presented on the screen as were the teachers, and they are not introduced verbally, but rather their status is inferred by the interviewer's

question. Obviously unscripted, they list through their responsibilities with an awkwardness that only comes from being totally unprepared, so we have returned to reality (or something like it). A green screen unexpectedly replaces the shot, cutting off one of the students in mid-sentence (obviously this in not a fate reserved only for teachers), and the screen is covered with the caption "What could have been done differently?"

Now the film maker's true agenda comes into focus: the first two teen girls interviewed state that there should have been better music, but then the next three girls agree that "You should have been able to invite other people," reminding us of the question asked of the teacher in the first interview. The second interviewed student adds, "grads from other schools," while the other two girls in the shot shake their heads in agreement. Then there is a jump shot back to the dance footage with the narrator stating "now that we've heard the wisdom of the students . . ." inferring that the last statement is wiser or closer to the "truth." The narrator returns to speaking at a breakneck speed so the end of the film is as manic as the beginning, and adding to the urgency of the piece, the credits roll by so quickly they are next to impossible to read.

In three minutes and seventeen seconds, the producer has taken us through the ritual of the dance, introduced us to both the teachers and students involved, and made a point about the rights of the students to bring in students from other schools. The producer of this film understood the possibility of media as a means of making her voice heard, that a political message can be embedded into a text that is seemingly innocuous. When interviewed, she claimed that the desire to have students from outside of the school was a general consensus of the students involved and claimed not to be trying to make a point. Was she afraid of repercussions, or was this an example of cinéma vérité, in which she inadvertently caught the

mood of the moment, albeit somewhat manipulated? Did she feel that to be a film maker, one has to manipulate the truth, or did she feel that being "real" means not being able to have an opinion?

Her self-representation was that of a disenfranchised student who had no control over who came to the shindig and attempts to draw attention to what she deems as an injustice. She is empowered by the film and used it as a means of question authority and decisions outside of her power. She represents the school as a place where students have little power over their reality, though it is interesting that most of those interviewed were women, including the teacher who oversaw it and the two girls that were more directly part of the organization. The producer is oblivious to the fact that the event was organized, orchestrated, and overseen by women and since the social aspects of the school are commonly controlled by women, it goes without notice.

This is the reality that the producer sees, so this is what the audience sees, a fast moving event that the female students seemed to like, run by awkward girls who were unprepared to answer questions about what they did. The most realistic scenes were those taken at the ritual itself where it does seem like the filmmaker is an anthropologist observing the strange courting ritual that it is (the dance scenes and many of the interviews and take place in natural settings).

Rouch (2003) discusses "the insistence on 'live' natural settings and 'first takes' with no repetition of what has really happened," (p. 16) which most of the students routinely used simply because, by their own admission, they were often too pressured for time to film the same scene more than once. Indeed what primarily seems to be a quest for the truth is, in fact, often the inexperienced attempt by the students to imitate "reality" TV, which incorporates the techniques laid out by Rouch and others, but not for the reasons laid out by anthropologists.

The girls used these techniques for the same reasons as the producers of reality TV: "There is no need to pay writers or actors, no endless rehearsals, no need for elaborate sets, no

need for rights clearance for music, and so on" (Sparks, 2007). The simplicity made their products raw and thus refreshing since it was generally not a deliberate attempt at distorting reality, but rather their vision in its truest "filmic" truth. They generally shot what they saw, not what they wanted to see, although, as mentioned earlier, that varied from producer to producer.

"Julia" *What will you miss most?* (Premature Nostalgia)

In Julia's film *What will you miss most*, her representation resembles a TV news "investigative journalism" piece with the anchor voice over, more than an anthologists cinéma vérité. Although this film has no scripting and relies on candid interviews, it is biased by the guiding question: "what will you miss most when you go to college?" The technique portrays cinematic truth, but the underlying question manipulates and distorts: is the producer naive or actually wise in the manipulative nature of media?

She clearly had an agenda, and in contrast to anthropological film-making, makes no attempt to portray reality reflexively but rather chooses to follow the pattern of reality TV in a manipulative manner that appears to be simply presenting reality. The film uses real footage and 'live' interviews done on first take as outlined by Rouch, but in fact the producer actively constructs reality and manipulates the viewer to accept the premise being presented.

One of the most interesting things about the reflexive interview phenomenon (for me as the teacher) is that I had not discussed the interview as a genre at all, let alone trained these girls in the interview genre. I had expected fictional narratives not unlike those produced by the boys, as in the case of the film discussed by Hackmann (2005). Although the task (make a film about school life) lends itself to interviews, they were not taught or instructed to make interviews.

Their choices were based on their notions of finding truth and following the anthropological tradition of film making (based on their own interpretations of reality TV), but many choices had more to do with personal reasons than techniques (more "fortuitous combinations").[47] When one producer (Linda) was asked why her film deliberately slowed down to focus on a specific poster on the wall, she freely admitted, "it was my poster so I wanted everyone to see it," rather than some deeper meaning.

This "incidental anthropology" that the students engaged in is well documented by their films, allowing for insights into their lives and the choices that they made to create these productions which might give insights into the girls' relationship to production. When asked to explain their choice of this genre over others, they often explained that their own lives seem unworthy of examination while they found the words of others did have credence and added credibility to their vision of their world. To those students, the interviews were reality and whether they were manipulated or not does not seem to factor into the equation for these girls.

As Denzin (2002) points out ". . . postmodern society has become an interview society, how our very subjectivity comes to us in the form of stories elicited through interviews" (141). This is the world that these students know: interviews manipulated by producers to create stories. These students had neither read these theories nor attempted to support them, and yet their films did support the notion of "the cinematic society" as outlined by Denzin and others, and this is simply because it is the society to which they belong. We do live in a second hand world, "one already mediated by the cinema, television and other apparatuses of the postmodern society" (Denzin, 2002; p. 141), and this reality was the dominant form that the girls in this project generally felt comfortable portraying and the manner in which they wanted to tell their stories.

[47] Reflecting back on the experience, I feel that although instructing them in interview techniques, teaching them "the real" in film making would have led to better films, I would have guaranteed the films were interview based and I never would have been noted the girls penchant for the interview.

It is interesting to note that the students varied in the levels of "reflexivity" they used, and in how truly dialogic their interviews were. Dialogic literature is communication with multiple authors and so at times there were genuine attempts to interact with the interviewed, while other times the interviewer had a definite agenda to present (Julia), and although the role of the producer is always transparent, the relationship of power between the interviewer and the subject changed dramatically between productions. The subjectivity elicited through interviewing varied from a monologue depicted as an interview (the first term training films) through to a more improvised series of interviews conveying an intended point of view, to a truly "cine-veritie" in their second productions.

I have commented extensively on the reflexive interview in the work of Stella and Julia. Before continuing, it is important to define what is meant by the "reflexive" interview:

> "In sum, to be reflexive is to structure a product in such a way that the audience assumes that the characteristics of the producer's life, the process of construction and the product are a coherent whole. Not only is an audience made aware of the relationships, but is made aware of the necessity of that knowledge . . . being reflexive means that the producer deliberately, intentionally reveals to his or her audience to seek answers to those questions in a particular way." (Ruby, 2000; p. 156)

The most interesting choice was the use of the interview method, used in all but three of the girls' productions. The task did not require it, nor were they trained in it, but the producers are prominent in these films (with the exception of Linda, whose work I describe later), and the girls seem to want the audience to understand their relationship with the interviewed. Their only

fault lies in the fact that they want the audience to seek the answers to those questions in a particular way.[48] The girls' films gave insights into the questions they wanted to pursue, and it is difficult to ascertain if the manipulation of the questions is really a violation of reflexivity altogether or rather simply lacks the finesse advocated by Trinh (1991). Trinh discusses the importance of the interviewer as the observer, not person who created what is seen/heard, that they should attempt to capture of objective reality, a "dramatization of "truth." These qualities cannot be assumed in novice film makers and suggests a need to teach these skills.

In general, the students had part but not all of the principles of the reflexive interview. The interviews were a deliberate attempt to seek answers as to what a student in this school at this moment in time was, according to the producers. Denzin believes that interviews are dialogic, a communication with multiple authors involving the producer, interviewer and interviewed. The dialogue extends in both directions, and the work is in turn altered by the dialogue: the interview is multiple work – both interviewer and interviewed negotiate meaning and the product (the interview) which alters reality. This is especially obvious in Angela's film (*The New Breakfast Club*) below, where multiple interviews are the script of a directed narrative with a specific statement rather than attempting to uncover truth.

The girls' films had some of these qualities: question and answers, turn taking (though not always fully played out on the screen), and shared understanding or constrained meaning, but on occasion these were not negotiated but rather directed by the producer of the film, some more blatantly than others. Since the students used reality TV as a model, they learned too well (biased

[48] As a teacher, I should have intervened when I began to note the interview trend to teach the interview, but my role as researcher made me decide against it, since I would be leading them. Initially, three of the girls had written up scripts for fictional depictions, and then asked permission to change to interviews. They did this of their own accord and had I begun teaching the interview, how could I expect anything else?

and/or directed questions) and so they emulated the farce of reality TV which portrays itself as unbiased and real, but is actually contrived since many media producers ignore the "participant-observer" dilemma: presence of interviewer creates a situation of power for storyteller and changes or even incites behaviour or views (Hagedorn, 1980). This is seen in both Julia's and Stella's productions where the producer blatantly manipulates the interviewed.

The students often missed the opportunity of true reflexive interviews and generally went in to make a specific point, manipulating the interviewed with prompting and cues. As Hagedorn et al (1980) observed: "Research using face to face interviews must be designed so that the results of the study are not the consequence of the interviewer's characteristics . . . appearance, behaviour, a raised eyebrow, a vocal inflection – all can influence the respondents' answers." (p.) These girls had no prior knowledge of reflexive interview techniques so deliberately led the interview since that is what they know, a common strategy of interviewers who don't understand what an open ended question is, mimicking the TV model that constantly leads the interviewed in a specific direction manufactured by the interviewer.

Stella's film more resembles commercial media, where interviews attempt to create news rather than report it (CBS News self-referencing its own Face the Nation Sunday morning show on their news broadcasts: Denzin's notion of "Reporters are reporting on reporters interviewing reporters." (2002; p. 150). According to Denzin, we live in a "Cinematic society," where we see ourselves through the "reflexive gaze of the cinematic apparatus." (p.)This is what the girls were emulating: models of adult behaviours (including interviews) are being taught to children via mass media in an "interview society." The interview is the dominant narrative, at least for the girls in this study.

In 1967, Marshal McLuhan spoke of education being outdated and outmoded in a culture raised in "television generation." This is more relevant than ever since although media has been added to the QEP curriculum, the interview is not a common genre in media productions in school. In view of the data here I would recommend that the interview should be taught alongside other genres, and although the interview is one of the "repertoire of texts" listed in SELA (Quebec, 2003: p. 96), there is no clear instruction on how this genre should be taught. Denzin gives a clear outline for no-biased interviews in his 2002 work on reflexive interviews.

Denzin builds on McLuhan's (1995) notion of the impact of visual culture and adds the reflexive lens, and point out that in mass media, interviews comment on what has already happened so we see what has happened and not what is happening or what is going to happen (McLuhan's "rear view mirror"). The girls in the study attempted to portray what was happening, but inadvertently structured their questions in the manner Denzin points to as being flawed since the girls had no knowledge of Denzin's "reflexive" interview. Perhaps an answer to this would be to have Quebec's Secondary English Language Arts 2 program (SELA2) include reflexive interviews as one of the genres to be taught.

Denzin also alludes to the notion of mediature, culture mediation through visual culture (popularized by *Merchants of Cool*), that representations of visual culture shape and define cultural identities and the everyday is defined by the cinematic and televisual. In the televisual world, the producers must convince audiences that what they see is real: infomercials portraying selves as news report, reality TV, etc. (Trinh, 1991). There exists in post-9/11 society a pursuit of naturalism, of authenticity – use of people who appear "real" in "real" situations: the interviewer is presented as an observer, not person who created what is seen/heard. This capturing of objective reality, dramatization of "truth" is how the majority of the older girls told their stories:

they attempted (for the most part) to present actual facts in a credible way, even though they often pushed the interviews in a particular direction, and on occasion (Angela) actually scripted the interviews. In Julia's film, the interviewer asks what the interviewed will miss most about high school, implying by the string of questions that high school has been a pleasant experience, one to be remembered fondly. This narrative of what might be described as anticipated (or premature) nostalgia implies that there is something to miss. A preconception by the interviewer contaminates, in a sense, the text: "Individuals become observers of their own acts . . . (they) live a reality arbitrated by the assumptions of media technicians." (Eason in Denzin, 1984:60).

Julia observes her own act of bias. Since she will miss the school, she assumes that all students in the school will miss it when they leave, and her guiding question ("What will you miss most about *West Island High*") presupposes the text. There are shared misconceptions between the interviewer/producer and the interviewed: the storyteller's notion of life beyond high school and a blissful, idyllic life soon to be gone without the notion that there may in fact be students who did not like their life in high school, but this possibility is not explored by the producer.

In fact, Julia's film becomes more interesting when it eventually "morphs" after several interviews: she temporarily become more of a cinéma vérité documentarian in the style of "Woodstock." Midway through the film, the camera simply follows the producer through the ritual of lunch time in the cafeteria and the producer rotates around the room, realistically capturing the noise and confusion of the cafeteria experience. At one point the filmmaker focuses her attention on some sort of even taking place on a stage but offers no comment (appears to be some sort of eating contest). The film becomes "cinéma vérité", exposing the high school experience for what it is, though it might again be an example of naive anthropology. The

filmmaker does narrate at times, but merely describing what she is seeing, an "observer of her own acts."

The next scene takes us into the classroom where the project originated, definitely becoming an observer of her own acts, as outlined by Denzin. She continuously illustrates the activities in the classroom, with a voice over that simply states the obvious, and might have been removed with no effect on the meaning of the scene. She then leaves the classroom and goes down the hall, followed by an abrupt cut and a caption that takes us outside where she once more reverts to some of the codes of reality TV and her biased interviews.

Yet can we be surprised about the approach these filmmakers take when this is exactly the line of questioning they have viewed nightly. The façade of reality TV comes through in the case of film number two where supposed "on the spot" interviews are punctuated by choral responses and choreographed cartwheels. What these observations depict is the need for students to be taught the codes and conventions of true reflexive film making, so that this tendency for reflexivity in young female producers might lead to a more authentic take on the high school experience, allowing for self-produced ethnographic studies like the studies on girls' spaces found in Mitchell and Reid-Walsh (2002, 2005), Baker, 2004, Sparrman (2005), and others. This would also allow for training girls in film production to hopefully incite some to take up positions in the field of media production.

"Angela" *The New Breakfast Club* (Scripted Reality)

The film produced by Angela is also reflexive in nature, but draws attention to an issue discussed in Gonick's (2005) "From Nerd to Popular." In it, the producer tackles the issue of

popularity in a salute to John Hughes' *The Breakfast Club*. The film opens in simple black then slowly various titles fade in depicting labels that students are given, some popular, some not. Promising to be one of Masterman's "fourth rate productions", it is instead a documentary with a strong message about popularity. Although all the reflexive films produced allude to popularity, this one specifically challenges the popularity status by inferring that all students are what they are, and there is no shame in being a "nerd."

By interviewing the students in the school who might be deemed unpopular, the producer is empowering them, illustrating the true potential of New Media: giving a voice to the disenfranchised, allowing those outside the normal spheres of influence to tell their stories. Unlike in the film described by Gonick (2005), the producer does not attempt to focus upon middle class over working-class values, but assumes a shared value system, depicting the student population as being diverse and somewhat classless (though this is somewhat naive since the average income of families in the school are well above the average found in the rest of Canada). What she is focusing upon is the more universal classification of status based upon personality, interests, dress, and so on.

This offering put an interesting spin on the idea of the depiction of popular versus unpopular through a powerful mixture of music that depicts an underlying tension that exists in the school. The producer uses a variation on the "bait and switch technique" where she begins with calm, serene music and black screen with Lucida Handwriting font that paraphrases the narration found at the end of *The New Breakfast Club*:

"You see us as you want to see us (fade out – fade in) *in the simplest terms in the most convenient definitions* (fade out – fade in) *but what we found out is that each one of us is (fade out – fade in) a brain (fade out – fade in) a scene kid* (fade out). Suddenly the music changes

and becomes chaotic and disturbing, a cacophony instilling a sense of turmoil and perhaps madness, followed by a fade in with the caption: *a jock (*fade out – fade in*) a princess* (fade out – fade in) *a rocker* (fade out – fade in) *and an artist* (fade out – fade in) *The Breakfast Club"* (fade to black). The next scene is of a busy, crowded hallway between classes taken from what appears to be a vantage point not normally available. A caption in Castellan font sets the video in the school "West Island High 09". The shot peers down at the students, inconspicuously overlooking their actions (only one student acknowledges the camera).

The music calms and the mood returns as the camera focuses on the handles of the lockers, probably a common view when looking for locker numbers, then cunningly lands us in the girls' bathroom, usually seen as a private space. The producer is allowing the audience to become voyeurs, inferring that we are about to be privy to something "secret."

Figure 8 – The Hallway

As Gonick puts it when discussing the scenes shot in the bathroom in the film she analyzes: "there the girls produce useful (gendered) knowledge and spend time together in one of the few places in the school where they might do so, away from boys and teachers, capturing the way marginalized girls may be productive in marginalized spaces" (2005; p.58). It is especially intriguing that the interview takes place in the bathroom since it is such an integral part of the school, yet is not found in any of the other girl's films.

It is this first interview that gives us insight into the overall feel for the film: that of interviews with all of the aforementioned characters (brain, scene kid[49], jock, etc.). The interviewed has her back turned to us as she washes her hands, but when she turns to face the camera's gaze, she is far too comfortable with the situation for it not to be staged. Still, as audience we are not insulted by this attempt at reality any more than by any of the staginess of "off scene" interviews on *Dances with the Stars*, or *Star Search*: we merely accept it as part of the narrative.

Figure 9 – The Princess

The shot changes abruptly to a much closer shot on the student's footwear (Uggs – a status symbol at the time of this study), then pans up to a comically staged haughty pose, admiring herself in the mirror. The girl is well put out, and as she finally turns to face the camera we are permitted to note the logo of her Dolce and Gabbana glasses. The light, airy music adds to the whimsical nature of the scene as the interviewer now makes herself known to the audience:

Interviewer: "What's your favourite brand?"

Princess: Uhm . . . Marciano (reference to the clothing line)

Interviewer: What do you classify yourself as?

Princess: A princess. (Strikes a pose)

[49] Euphemism for Emo style teen.

So the first interview is with one of the "popular" girls, though it is obviously staged. For the producer, it is the depiction of a stereo-type that was introduced earlier, so the producer is trying to be ironic, while for the interviewee, it is a chance to play the role of the popular girl (or perhaps she does see herself in that way and is not afraid to classify herself as such, even if it is staged).

The producer then returns to the boot shot, again panning up over the "princess'" face as she poses as if for a glamour magazine. To add to the irony and help dispel the myth of the princess as being "dumb" the interviewer asks: *"What is your overall average?"* (Grade) to which the princess proudly announces, "91". In this interview, the producer is now making the purpose of the film clear: to dispel all of the myths and stereo-types associated in high schools. She has gone from documentary filmmaker to story-teller, though some of the interviews are much more real than staged, but certainly not the next one.

The next shot is a pan across a poster that announces "Junior Honour society" which takes us to a low angle shot of a male Asian student wearing a thick mustard sweater and thick, black-rimmed glasses, epitomizing the stereotyped image of "the nerd."

Interviewer: What is your overall average?

The Brain: 92

Interviewer: What do you classify yourself as?

The Brain: A brain.

Interviewer: What is your favourite sport?

The Brain: Rugby

So as the Interview goes through the groups, we see the transformation, much like Gonick's (2005) description of the film of the girls' Cinderella story of social transformation, but the transformation is immediate, and always existed within the interior of the student themselves, not needing the help of the "popular" to redress the nerd (a far more feminist story). Though alike in theme to the students' story explored by Gonick, in this film, the producer is creating a representation of school as full of contradictions transcending stereotypes: the princess is smart and the nerd is a jock.

The next interview challenges the notion of the jock himself. The third student interviewed is dressed in an NBA basketball jersey, and stands arrogantly in the computer lab. The choice may or may not be deliberate but adds to dispelling the myth of the jock by placing him in a very "unjock" location, a space usually reserved for "nerds."

Interviewer: So what is your favourite sport?

Jock: (Nods arrogantly) Basketball!

Interviewer: And what would you classify yourself as?

Jock: (looks around, ponders the question, chewing on imaginary gum and answers) Jock

Interviewer: And what kind of music do you listen to?

Jock: (noticeable change in deportment, there is an audible difference in his tone, which becomes gentler and more civilized) *I'm more interested in the classical type.*

The film again take on a comical air, with the stereotype so obvious and the transformation so extreme, one cannot help but smile. Reflexivity is fading, but the point is well made: all students are multi-dimensional and there are no pure "jocks" or "brains."

We then return to the hallway where the camera scans over legitimate posters of student interest: the famous grad shindig, a poster referring to "pride week,"[50] and several others that are impossible to read. We are then magically transported to the cafeteria, a public space where sports jerseys hang from the ceiling. The whimsical oboe music that took us to the first hallway scene returns, calming the noise and confusion of the cafeteria.

The producer then returns to the documentary genre, panning through the cafeteria to allow us to see and feel what it is like to be a high school student at lunchtime (a bit intimidating and seemingly more confusing due to the choice of a hand held camera). We have gone from the individual to the group, offered more than a thousand students, each one equally unique.

The next stereotype to be exhibited is the "Scene" kid (otherwise known as "Emo"). We leave the cafeteria and find ourselves in the hallway again, looking down art a hooded girl looking dark and solemn:

Interviewer: What's your favourite color?

Scene Kid: Black

Interviewer: What do you class yourself as?

Scene Kid: Scene

Interviewer: What's your favourite pastime?

Scene Kid: Painting and going to the mall (smiles in a most Un-emo manner)

Following the format of the film thus far, since she says she likes to paint we then meet a boy who classifies himself as artist, a scene that then takes us to a "Meathead" (Metal head or

[50] It is interesting to note that heterosexuality is so embedded in the school culture that the implications of "pride week" are totally lost on the students.

Head banger Rocker circa 1979) who likes Jazz, and so it goes. The film ends by returning to the same shot of the hallway of many with a new, stirring trumpet piece heralding more handwriting on black background announcing "We are all . . . a Rocker . . . an Artist . . . a Brain . . . a Princess . . . and a Jock" as the music grows more and more stirring so that when the titling claims "that is what unites *West Island High* School," the musical piece is almost at a crescendo which then quickly fades as the titling fades to black.

Unlike Kearney's analysis of young women making films about women's experiences, these films are about the experiences of high school students and are less explicitly related to gender themes. The thing that separates the girls' films from the boys' is the reflexive nature of the videos themselves: it is the method not the message. Angela depicts being stereotyped as a universal experience, not a feminist one.[51]

Angela's *New Breakfast Club* is more an attempt to get a message across, that all students are the same and cannot be stereo-typed, a message that reflects on her own experience of being "a brain," but she includes others experiences of being stereotyped to drive the point home. This illustrates the universality of the students' reflections, which are less personal in nature, with students not so much attempting to reflect on their own lives, but rather reflecting on what it means to be a student. In some cases, the results are universal: Linda's tour of the school (below) captures the fast paced feeling of rushing through the day for a student, with little time to focus. Julia's *What will you miss most* is more personal: since she will be missing her life in the school, she tries to project this nostalgia onto her friends, but it really speaks of her own feelings.

[51] It is interesting to speculate how the tone of the videos would have changed had the girls been told to present a film on their experience in high school as a girl.

Linda: *This is West Island High*: Cinéma vérité and physical space

Linda's *This is West Island High* is intriguing in that there is no narration, no dialogue, though music permeates the film, changing half way through. She offers an ethnographic reading of the school (not unlike my own chapter four). However, since it is filmic, it is far more powerful and efficient as an expository. In fact, she manages to explain in two minutes and twenty-three seconds what took me twenty pages to describe in the chapter on the physical environment.

The film starts in simple black before a title appears stating: "This is (pause) *West Island High* as the music slowly starts with a single note of an electric guitar repeated at increasing speed. The producer takes us on a whirlwind tour of the school[52] in one minute and thirty seven seconds), only to slow down once to view a poster (she explained later in her interview that the poster was her own work and she wanted to showcase it). The music matches the speed of the tour and the tour is very thorough, taking us through the entire school (all three floors through all hallways including the upper floors), occasionally entering her classrooms for a split second.

The halls are empty which clearly indicates she shot the film after hours, and the emptiness adds to the sense of isolation and loneliness of the film. When the tour is over, the screen goes black again and a title announces, "Just some people showing their *West Island High* Pride." What follows is a lone boy wearing a winter jacket sliding back and forth across a patch of ice. She played with the effects in editing and so the colors slowly shift from blue to green to red monochrome, finally returning to true color when the boy finally acknowledges the camera.

[52] She approached me during her editing to ask me the process for speeding up the film. The next day she asked me if it was possible to speed it up even more, which it was, but it was rather tedious, having to render the film then re-insert it into the editing program. She repeated this procedure, three times before she was satisfied.

The screen fades to black again to announce "and some great teachers" which takes us to a very unusual "interview": she is literally hiding behind two students (who are in focus), spying on a teacher who is engaged in a conversation at the door of his class. He is oblivious to her filming, out of focus which gives the feel of an anthropologists gaze (or even "hidden camera" expose television), but it also adds to the general feeling of isolation that permeates the film. When I asked her later why she did not interview the teacher more directly, she claimed that she didn't want to bother him, that the teacher "was probably too busy." Yet this is cinéma vérité in its purest form, since she simply films what is occurring with no commentary, no interview. She is depicting reality as she sees it, leaving the audience to create their own reality, a "silent interview" of the school and the teacher.

The film then digresses in the final seconds into a slideshow: the silent interview fades to black and a misspelled caption reads "Our Christam Spirit" [sic] followed by a three image slideshow of Christmas decorations in the hallways, that are almost disturbing in their bleakness: dark shots focusing on the dangerous wiring (a quick visit by the fire inspector would have been most unfortunate at that time), followed by a still of a series of lockers that have been wrapped as oblong presents, but the wrapping is torn and frayed and the background of the shot is dark and foreboding. Her vision of "Christmas Spirit" makes Burton's *The Nightmare before Christmas* look like *Charlie Brown's Christmas Special*.

Upon seeing this film, I was disturbed by the fact her vision of the school portrays a darker, dirtier, smaller vision of the school than my own. She has shown me a school I did not know existed, though the speed of the tour reminds me of the repetition of the day to day travel from one class to another, constantly rushing through the corridors, slowing only for a moment to gaze at something you helped to create, too busy to enjoy the surroundings. In his way she has

perfectly captured the essence of high school, and the lone boy skating back and forth captures both the isolation and monotony also found in this and any high school, in sharp contrast to Julia's "*What will you miss most at West Island High*?"

Linda's production seems to be the voice of the shy student who may not be missing much at all. It is interesting that Linda is the only student who plans to pursue a career in media, since she has an unusual perspective and created one of the most disturbing yet telling films of all. This text could be further deconstructed, but it is time to use yet another form of textual analysis, my interviews with the producers themselves to gain further insight into the eye of the producer who interviews. This I do in the next chapter.

Further discussion of the films as a whole

The strength of grounded theory is it allows the discovery of information in an open-ended manner that allows for knowledge to present itself. I entered this research attempting to find out why girls don't go on to careers in producing media, and I found that part of the problem might be in the manner that film production is presented to them. Given the choice, girls like to interview. Perhaps if more girls were permitted to produce media that involved social aspects such as interviews (remember Holloway and Valentine's study on how making ICT about communication alters their perceptions), then their experiences might be more positive.

That girls will choose to be reflexive was the true findings of this study, though it supported some of the research already in place (Gilligan, 1982; Eagly and Johnson, 1990; Fallows, 2005, Holloway and Valentine, 2003).

The films created by the girls are manifestations of reflexivity, giving insights into both to "hallway culture" that exists as well as indicating the need to teach reflexive interviewing skills (or at the very least, interviewing skills) to aid girls who chose this particular genre of film production. It is regrettable that only five girls consented to the study for many of the other girls' works were equally interesting. The works in of themselves were fascinating depictions of the life of a female adolescent that inadvertently replicated the work of Bloustien (2003), though that was neither my intention nor the students'. Indeed, this "accidental tourism" or "naive anthropology" might well be a model for future instruction of media in high school since media production is a technique waiting for a subject. Another aspect of Bloustien's work that was replicated was the notion of "association clusters." Bloustien noted that girls created "clusters" of friends, and I found it interesting that the girl's films depicted these "clusters" in the way of who was featured in whose film. Similar faces kept appearing in the films, and they were not always those of students in the class. One could map the friendship matrix by analysis of the films, including ratings of popularity and perceptions of the self in those clusters. This goes beyond my mandate from the ethics committee, but it would make for an interesting future study.

I feel responsible for the poor interviews which led to the directed interviews, but this is part of the findings; interview techniques need to become part of the curriculum. The students eventually created more films including a public service announcement (PSA) as part of a unit on children's rights, but were not given the freedom they had in the previous films. The new films were well crafted, but once again the boys made light of the task, creating parodies of PSAs rather than actual PSAs. The next chapter outlines findings generated by the interviews and surveys which add to the general inquiry into why girls don't do wires and how curriculum can be modified in order to facilitate girls' interest in media production.

CHAPTER SIX: The Producer Texts - Surveys, Interviews and Journals

The final text to be addressed in this thesis is Fiske's producer text. The producer texts are based on surveys the students answered before starting their film-making, the interviews done during and after film making, and the journals that both accompanied and followed their film productions. The surveys functioned primarily as a benchmark in relation to where the students were with respect to their understanding of, and experience with, media and media production when they entered the film-making classroom. The journals gave insights into the decisions they made during production as well as allowed for analysis of the thinking processes unique to the girls in this study. The interviews gave a more in-depth look at their understanding of media, the decisions they made in production as well as possible insights into their interest in pursuing media production and decisions surrounding those choices. Each aspect of the production text serves as a record of the student's evolution and growth in the realm of media production.

Surveys

The surveys (see Appendix C) were given out in the first week of classes, a standard practice in my technology classes. This practice was repeated in the English Language classes upon the first time entering the computer lab. The surveys were a combination of open ended questions and closed or 'forced' questions. There were several assumptions and limitations to this survey: first, the study used some forced choice survey questions (Q2) meaning that the respondents were not free to state their views on the questions but had to select from a number of

written answers. This means that some of the answers may not accurately represent the point of view of respondents but the most closely related view point. One interesting note is that students occasionally ignored the closed nature of the questions and altered it to fit their responses: "Maybe" began to be used by students and so had to be added to possible responses, while responses to Q21 "how many hours a week spent on homework" included "depends" and "depends when I have a project."

Findings of the surveys

All students in my classes were surveyed, whether they were in the study or not. In the end there were thirteen girls and four boys in the study, so the findings focus on these seventeen students.

As mentioned earlier, all students in this study claimed to own a computer or had access to a computer at home, as well as having prior experience using computers at home or at school. On average, the girls rated their abilities as "good" to "very good". Boys generally rated themselves higher; three rated themselves as "very good", with the only student to rate himself as "great" in relation to ability with computers was a boy. The surveys supported the notion that boys feel comfortable on computers and see media production as a possible career (75%)[53].

Girls rarely stated an interest in either ICT or media production (25%). When asked if they wanted a career in computers, only one girl stated overtly "yes" and one responded "maybe" while the boys felt: "it might be a fun and interesting job" or "possibly, it might be fun". In one case the boy was more discerning, answering "depends where I would work." One boy ignored

[53] Three of four boys stated interest in a job in the field although one boy initially responded "no" to working in the gaming industry, but then stated "Because it might be a fun and interesting job" when asked to explain why or why not.

the closed nature of the survey and stated he would like to be a "graphic designer" when asked if he had ever thought of working with computers as a job (Q13). The only boy who initially stated he was not interested in a career in ICT seemed confused about what was involved.

"David" seemed to have assumed that working with computers meant repair: when asked if he was interested in web page design, he claimed, "No because I don't know much about fixing the computer" and for Q14 (Have you ever thought of working with computers as a job) he responded "no" and answered the "why or why not" question with "because I'm not so good at fixing things on a computer", and later contradicted himself (see footnote).

Of those girls who did state an interest in media production (25%), film production was the most common choice as a career in media: "Because I like to make movies" was the response given by one of the junior girls. Half of the girls surveyed claimed to have made videos before, while all four boys stated they had made videos prior to the survey. One girl claimed she had thought of a career in video production. Seven of the thirteen girls claimed they had created Power Point presentations prior to starting the course and three of twelve had created web sites outside of school, although only one girl, "Linda", stated that she was actively pursuing a career in web design and had enrolled in a college program in producing dynamic web pages.

There were other girls who demonstrated interest in some aspect of media production: "I would rather be a photographist" (sic), and at least one girl who responded to the question "have you ever thought of working with computers as a job" with "Yes because I am very good at using them" but these girls accounted for approximately 15% of those involved in the study, around the same percentage of women involved in media in the workplace, so although there are girls who are interested, they demonstrate a much lower interest level that than the boys at 75%.

Girls' stated reasons for not entering ICT or media production varied, but generally showed a lack of interest and/or apathy: "not a big interest of mine"; "boring"; or "it just wasn't something I was thinking about." Other girls indicated they wanted to do something else: "Because I would rather be a doctor," or "because there are other, better things to do with my life." On occasion there were indications they were confused about what the job entailed: "It takes a long time," and "It would hurt my eyes too much." Confusion did play a factor in their decision more than once; when asked "have you ever thought of making web sites as a job", one girl "Marissa") thought she didn't "have enough imagination to work in computers."

A few of the girls seemed reluctant to enter media production because they believed it to be too difficult: when asked if she had thought of taking up a career in web design, "Amelia" stated "I am not so interested in doing so and I think it would be trouble to make a web site." She also stated she was not interested in video production: "because it seems like a lot of things to take care of", but when asked if she had any special skills she wrote "I can make surveys and charts in Excel." She also seemed somewhat open to the notion of media production later: when asked if she had thought of working with computers as a job (Q14) she stated "It seems a complex job though I don't mind working with computers. After I finish a job on the computer I am satisfied." She wrote that she did not consider media production as a career, but stated on Q25 "Making computer games seems interesting."

"Jane" was one of the girls demonstrating interest in one aspect of media production: film. She had no interest in producing with web sites, "because I am not really interested in working with computers: "It's kinda boring," but for film there seemed to be another motivation: "maybe because making a movie you can make a lot of money." Unlike Amelia, she was not

interested in making game production a career, "because I don't really like video games on computers."

Some girls thought film production had to involve camera work: Laura stated she didn't want to make films "because I am not a very good filmer" but then when asked if she was interested in computers as a job, she stated she was interested "because there are so many things to do and find out." To Q24 computers as a career, she answered "yes" but was not sure about where in the field she should go, answering "I'm not sure."

The answers of the senior girls were generally similar to the juniors. For example, when asked if she was interested in web page design, Stella responded: "I don't know how to use computers that well and I think it would be boring" and Julia responded "I want to do something else" while Angela responded "no, because after a while it will get boring." Unfortunately Linda and Cleo did not hand in their responses which was regrettable since Linda was the only senior girl actually going on to study web page design (but she does discuss her plans in her interview).

Senior girls did not indicate much interest in producing computer games either: when asked if she wanted to go into game design, Julia responded "no I don't even play games at home", while Stella answered bluntly "I am not interested." Angela's response was a little more promising with, "no, because I would rather be a doctor", a response also found in one of the junior girl's surveys. This study tended to support existing research that boys are for more interested in using computers for gaming purposes than girls although the work by Weber and Cluster (2005) and others (Lenhart, 2008: Augusto, 2004) tend to dispute this gender stereotype. However, though girls initially show interest in computer games, as they mature, their gaming interest and time investments decline (Mumtaz, 2001). This can be explained by the simple fact that like most media, games are made for boys (Gailey, 1996; Gorriz & Medina, 2000).

How teens in this school spend their computer time.

In this study, students' use of computers seemed to increase with age, supporting existing research (Kaiser, 2005) that older girls spend more time on Internet than younger girls. The average junior girl spent 1.8 hours per day on-line versus one hour for boys of the same age, while senior girls spent an average of 2.5 hours per day, although one senior girl claimed that she used the Internet "only for homework" indicating no interest in using ICT for communication. [54] This might be more indicative of parental supervision/control waning as the girls grew older.

Another interesting finding was that the younger girls spent a larger percentage of time instant messaging (IM), while the senior girls spent a larger percentage of their computer time using social networking sites to communicate. This might demonstrate a development tendency within teen girls, or again simply as parental supervision waned, it allowed them the time to create and maintain social networking sites, a privilege not available for younger teens.

General use of time spent on computers (in hours per week) by gender also tended to support existing research: girls spend more time on computer communicating (social networking and instant messaging at 8.55 hours per week), followed by entertainment (watching videos, listening to music at 1.5 hours). These findings support most of those found by the Kaiser Foundation (2005) but not all: this study supported the Kaiser study that girls listen to more music than boys, and did find that boys spent more time than girls playing games, but the gap here was not as extreme as cited in the Kaiser study. The Kaiser study also found that boys spent twice as much time playing games, but in this study while boys spent on average 35% of their time playing video games (4.6 hours per week) girls spent an average of 20% of their time (3.65 hours) as well, supported in Agosto's (2004) research mentioned earlier.

[54] Since no senior boys entered the studies, their habits could not be compared with senior girls.

However, data on the use of computers in this study tended to support the general belief that boys spend more of their time gaming (4.6 hours) and other forms of entertainment (4.5 hours per week) while girls spent far more time social networking (4.3 hours per week versus 1), and much more time instant messaging (girls averaged 4.25 hours while boys only 1.125 hours per week).

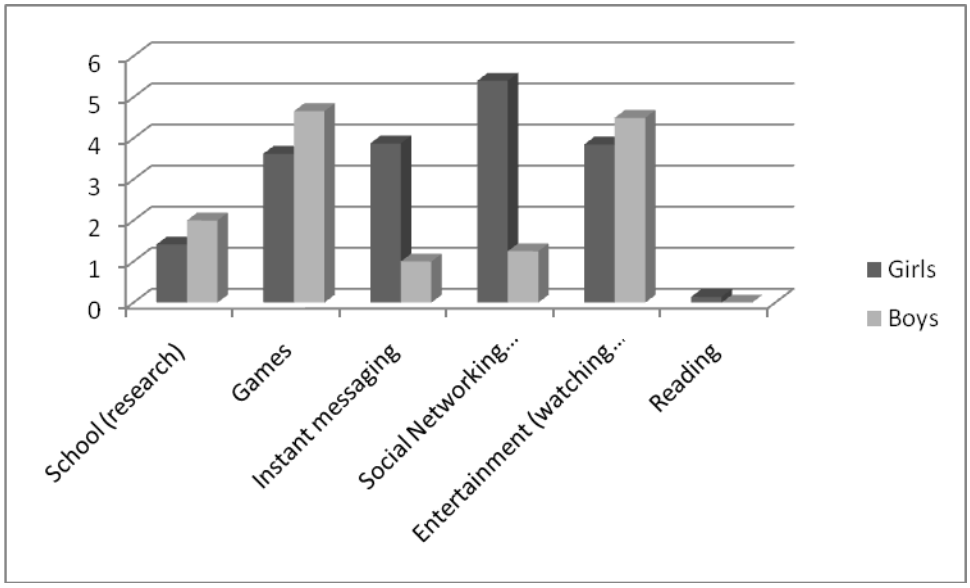

Figure 9: Stated use of time on computers by gender (in hours per week) during my study

In general, this survey tended to generally support much of what has been already researched on gendered use of computers, but the responses of the girls concerning their interest in media production as a field of choice was somewhat different than would be expected. Looking at the surveys, it seems that girls were not as **intimidated** by media production as they were **uninterested**, although there were signs that some misconceptions about media production do need to be clarified in students, both male and female.

Interviews with the producers

The interviews took place following the students' second film project, in order to give the students some reference points for discussion as well as the simple fact that many of the students were quite slow in returning permission forms, so the interviews were staggered. The majority of the interviews took place between the 11th and the 26th of January, 2009 (the end of the second semester), but some were as late as February, with the final interview taking place in May.

All interviews took place in my classroom described in Chapter IV, with each participant seated at a desk facing the video camera. The camera itself is a small, lightweight, red Panasonic SW21 compact SD digital camcorder, about 12 x 8 x 4 cm in size, which sat unobtrusively on my desk (in the classroom depicted in the Chapter Four, about half-way between the student and the teacher-researcher. I would first ask a few warm up questions (name, age) to put the interviewee at ease then began asking the questions as outlined in Appendix D.

The interviews confirmed what the surveys had already pointed to, that many of the students had no prior experience making films and that students' explicit knowledge of media was almost non-existent, so prompting was sometimes necessary. It was interesting that there was a certain amount of confusion between media and mass media, as explained in the literature review, validating the notion that the use of the differing terms confuses those studying media:

> *Interviewer: Okay, so what do you know about media production, what is media production?*
>
> *Linda: Uh, like how the society thinks like, ya what the society thinks of us and . . . ya.*
>
> *Interviewer: Okay, do you think you have a good sense of media?*
>
> *Linda: Uh, not really, kind of, I guess, I don't know*

Interviewer: Alright, what do you think is the most powerful medium, like film, television the Internet?

Linda: I think Internet because you can find like anything, and anything you want, anything, like on TV you might not find what you want but on the Internet you just type in and you can get whatever.

Questions on the possibility of students going on to higher education in media production were confounded by the age of the students: girls in grade seven and eight were too far away to consider their options, and those that had thought that far ahead often had not considered media as a possible career path. One exception, a grade seven student (JoAnne) did express interest in going into still photography and was enthusiastic about pursuing the art, but many of the younger girls seemed vague about their future plans. Conversely, the senior students, who were already thinking about which college programs they wanted to apply to already had a strong sense of direction, and only Linda indicated any interest into entering media production, and even she was not quite sure where it would take her:

Interviewer: Okay what's your age?

Linda: I'm 17

Interviewer: And where are you planning on going to CEGEP?

Linda: John Abbot

Interviewer: Okay and can you explain the program?

Linda: Um, It's PDHD, it's like HTML and uh like web design, ya.

Interviewer: And how long does it take?

Linda: It's a career of, a career, like a study of three years.

Interviewer: Okay, and uh, where do you think it's going to take you? Where do you want to go with it?

Linda: Um, I'm not really sure, somewhere small maybe and it'll eventually like give me an opportunity to like have bigger things, opportunities.

Two of the younger students who were more firm about their future plans stated they would like to go into writing, and to confirm this, two of the junior students stated that they felt text was the most interesting media:

Interviewer: What do you think is the most interesting media?

Laura: Um the most interesting… personally I think it's written because you can show, you can explain things and have (laughs) um you can explain things and have dialogue and everything (nervous smile)

Interviewer: Okay which one do you think is the most powerful?

Laura: Um I think film because you can show it and everyone can see what's happening, instead of having to like (stumped) I'm not sure (laughs)

These answers are almost replicated with another junior student from another class:

Interviewer: What do you think is the most interesting media?

Laura: "personally I think its written because you can show . . . you can explain things and have like . . . Uhm (laughs) . . . you can explain things and have dialogue and everything"

These responses indicate that the girls have stereotypes of media production: girls can write, but not produce (see Chapter Two for reference to media portrayals of woman as media players, specifically the plot to *The Devil Wears Prada*). However, during the same interview, this student also acknowledges the power of film:

Interviewer: Which do you think is the most powerful?
Dominique: I think film, because you can show it so everyone can see what is happening. Instead of having to like . . . (laughs) . . . I'm not sure." (Changes subject)

These quotes also illustrate a particular challenge of a project like this: often the students did not possess the vocabulary to articulate their thoughts so often the interviews were short, and many of the students' response were brief and at times awkward. This student seems to be aware of the power of film, but cannot communicate her feelings on the subject. This indicates a need for teachers to first acquaint students with the vocabulary they would need to engage in such a conversation, for the senior girls seemed equally unprepared to discuss media and at times mixed terms indicating a lack of understanding.

Still, in spite of a lack of vocabulary to articulate their thoughts, students were often able to create interesting and thoughtful films, which could be a direction for future research. Many artists created brilliant works of art long before Art Theory classified and categorized the codes

and conventions of painting, since what they lacked in cognition, they more than made up for in inspiration and talent. Linda (*Cinema Vérité*) seemed to lack the vocabulary to discuss her ideas:

Interviewer: What decisions did you make concerning your last video production, so like the commercial you made what were some of the choices you had to make?

Linda: Um well in the beginning I made it like fast motion so it looks like more intense and like, I don't know - you look at it more I guess? And I put like music in the background, and… yes.

Interviewer: What helped you choose your music like what were you thinking when you choose your music?

Linda: Uh I don't really know I just kind of thought what would go with it best and what sounded the best, I liked it so…

Interviewer: What was the message in your video?

Linda: It was like West Island High pride and how like just to see around the school and like how we are in the school.

Interviewer: And what was the mood you were trying to set?

Linda: Um, I guess like inspiring to come to the school kind of thing

Interviewer: Ok, now what inspired you? Did you have any ideas or things that made you think that's what you wanted to?

Linda: Not really. Actually, I just kind of… no, not really

Interviewer: And what about the use of lighting? You filtered some of the lighting like after you did effects, the guy skating on the ice…

Linda: Well I don't know, I just found it looked like cool, so I left it, I don't know…

The interviews highlight the level of inexperience expressed by these students, even after two terms of discussion of film and having produced two films themselves, but in this student's case, she demonstrated a certain innate knowledge of aesthetics. Linda's film (analysed at length in the previous chapter) is the only one without formal interviews and yet she appears to have captured a mood of isolation for the students, which might be projection on her part. The "guy skating on ice" was particularly poignant for it involves a solitary figure skating back and forth across a small patch of frozen ground after the tile "some people showing their *West Island High* Pride". She has experimented with color so that the shot of the boy is in monochrome that continually changes colors as he skates back and forth across the ice, alone and isolated. She captures the mood, focuses on it using lighting techniques and special effects, yet she is unable to articulate the ideas in the interview.

What is interesting is her growth through the year. By the end of the year she has made two more films, the final one a public service announcement on water as a human right. In Linda's final journal, she is much more articulate and aware of her choices:

My decisions for my last video were to show how water is being wasted in our country. We decided to put sad music and slow motion effects to show how the destruction of society is being slowly going underground (SIC) and we need to help our world be a better place for us to live in and enjoy life as we should. In the beginning and end we put a black screen so that people can really see what is happening in our world and reflect on this situation. We wanted people to know serious this problem is so that they can try to help save the problem.

I do indeed believe that I have a better sense of knowledge in this topic. Media producing is hard to make because not every person who watches it is going to agree with it. You have to really capture the attention of others in a way that they will understand the problem and want to help the situation. Before this class I did not really have an opinion on this subject. I was quite naïve. I had a brain of a snail but now that I have had the experience to communicate and teach. I am well advised of the media and I think that at times it could be bad and influence others.

This journal is particularly enlightening as the student actually realizes her inexperience "I was quite naïve. I had the brain of a snail . . ." a bit self-defacing but indicated she has begun to understand what she does not understand, so there is growth. The journals did add certain insights, and add to the body of knowledge of this work, but they also demonstrated a lack of understanding of media, and thus a disadvantage in selecting media as a possible career path.

Journals

As evident above, the journals were an important source of data. The journals were initially written during and after the first production (Photo Story documentary of the school) as an assignment connected to the course (typical in the Technology curriculum and a standard requirement of the IBO Technology design cycle). Due to redundancies found in the first and second journals for the first films, the second, third and fourth productions only had one journal required upon completion of the production. In the first journal, the students were required to explain what they had been doing, problems they encountered, and the solutions they had come up with to solve the problems. The students' first journals revolved around use of the equipment and their, frustrations. They were rather narrative/descriptive in nature:

> *"However it was a bit hard taking pictures and filming. Some teachers didn't even let us do it, they said it was prohibited to take pictures in the hallways and stuff like that, also we wanted our pictures and filming people to be unexpected, just showing how students have fun, and what things we do that makes us feel special for been* (sic) *part of West Island High, our activities as* (sic) *Skittles day, and sports such as softball. But some people didn't want to take pictures of them or they noticed that we were trying to take unexpected pictures and started posing, so that was hard to get." (Stella, October 28, 2008)*

Although initially mundane, the student has become aware of a problem that will mould the reflexive interviews to come: staging of pictures versus authenticity. Stella noted the students

"posing" for images, which would affect all of the productions, although she hasn't figured out what to do about it. Some students film through it while others actually pose or rehearse the students, blurring the line between the authentic and the staged.

The second set of journals (Journal 2) from the first term gave interesting insights into the students' thoughts on video production and the decision making process:

> *"I personally enjoyed editing the sounds for the video. I believe that the characters voice, background noises and songs distinguish whether a video is a good or not. I took the time to make sure the clarity of each persons (sic) voice was understandable because if the viewer can not hear what the character is saying then I have failed as an editor. I also added the sound of a bell ringing. I find the bell sound to be a typical school bell so there is no confusion about the sound. Being clear and almost exaggerated can help your video to have good quality. I took the time to add in some music in certain scenes, such as the scene with in the gym. I made these decisions because I think it makes a good sport scene lively and energetic." (Angela 11/3/08)*

Here the student is able to articulate her understanding of the importance of sound in her production. Indeed, the sound effect does add to the overall effect and feel of the film. Although the student lacks the filmic vocabulary to discuss sound editing decisions, she does depict them quite well. After having gone through the editing process, she has more of an appreciation of the nuances of video editing:

"Editing the video was the longest part. This is natural because I filmed more than necessary just in case I was short a couple of scenes for our video. I took a lot of time editing the movie, such as the scene where (students name deleted) *is walking into the gym. One scene she is walking and talking about to open the gym door and then the next scene I positioned myself in the gym so that the viewers could see her walk in to the gym. I had to edit this scene quite a few times because the timing had to be just right. Also, I had to lower the background noises in the gym because they were too loud. All of this is part of editing a movie and it is all necessary." (Angela, 11/3/08)*

The students also gain important insights which will aid her in her later films:

"I think we did a good job, but there were some aspects I think we could've done better and more efficiently. For example, in some of the interviews, I think I should've had find (sic) *a better spot to film the people in the video at better angles. Another thing would be, in one of the interviews that we did, we had interviewed three grade ten guys, it wasn't really in a quiet place, there was a few annoying noises in the background, I think we could've pulled them into a more quiet corner." (Stella, 10/23/08)*

Perhaps this is the reason for some of the later staging: their initial attempts were more authentic, but problems with sound come up in journals, and so the girls felt a need to isolate their interviews so as to avoid these problems. This is the first step away from the truly reflexive gaze that they innately attempted to achieve. This might explain their creation of private spaces in order to shoot their next film, which will alter the look and feel of their films.

One interesting reference in the review of the first film is one to the next film one of the girls will produce, the filming of *The Grad Shindig*. Although a group effort, the two students learn a great deal about not only how to shoot, but how to deal with scheduling and logistical problems:

> *"One difficulty that we encountered was that when we first made our storyboard we included events such as Grad Shindig which are happening after the project was due. We then had to change our storyboard in order to reach the deadline. That is when we came up with more ideas of activities and just a normal school day at West Island High. Although we couldn't include that event, we found other alternatives in order to complete our project." (Stella, 10/28/09)*

This student wanted to include the upcoming dance in her first work, and perhaps this gives her longer to prepare and plan for it. She was also learning what technical problems may occur and how to deal with them:

> *"As for lighting, locations, time of day we couldn't control all of it. For lighting we weren't really able to control that very much because most of our videos were taped inside the school. However, the videos that we taped outside we were able to control by choosing the time of day to tape it such as morning or afternoon. We were able to control the type of shot we did. We tried to switch it up and use different types of shots although that is not always the easiest thing." (Stella, 10/28/09)*

As the year progresses, she make great strides in understanding the complexities of media production and how multiple shootings are necessary besides mise-en-scene:

> *"There are many challenges and problems that I confronted when making a media production. Some of the things that were difficult were that our scenes did not always turn out how we intended or pictured them to look like. We often had to film our scenes several times before they turned out how we wanted them to look. Also we often had to consider the sound effects and background music which was also difficult. It was very difficult to try and find a song for the background of our film that would relate to our theme and message." (Stella, 06/03/09)*

She also demonstrates further understanding of how powerful media can be, but this does not inspire her to further her studies:

> *"My appreciation for media has changed because I now have come to realize how much work and time goes into various different forms of media. I also realized that lots of time and coordination is needed in order to get things right especially if many people are working on the certain thing/ for of media. Throughout the year I have learned that media in general is a good way for people to communicate there feelings and ideas to a large audience." (Stella, 06/03/09)*

However in an informal discussion on media as a career (in her interview she had previously discussed no interest in the field as a viable option for the future), this student stated

that the experiences producing films had merely substantiated her belief that media production is tedious and "too much work." She does acknowledge the power of media as a vehicle for communication and change:

> *"I believe that media is a very influential thing and that it could change the world if it is able of getting its message across and it is able to persuade the audience to having new thoughts. Also through media messages can get across to many people especially film because people can make commercials that will air on TV and that millions of people will see." (Stella, 06/03/09)*

Other journals validated the notion of Kearney (2006) and others in pursuing media education as a means of subverting patriarchy:

> *"Also my experience has changed because I now know to see all the sides of the story and question the media, instead of believing in it with blind faith. I learned that media is a really good way to motivate people into doing things they'd normally be too lazy, or unwilling to do. I also learned that the media is a really good way of manipulating people to do anything you want if you put enough spin on it. I think that media could definitely help change the world if the right people make it because it makes people think about the issue instead of being oblivious to the situation." (Stella, 06/03/09)*

In the end, the findings were somewhat disappointing in as much as simply allowing girls to produce media is not of itself powerful enough to sway the girls to take up the cause. One of the younger girls sums it up best in her interview:

Interviewer: Okay, have you ever considered going into computers or media as a job?

JR7: No.

Interviewer: Why not?

JR7: Because I find it's to complicated, and I'm not like, right now, I'm not really good with computers, like with digital stuff

Interviewer: Okay, What's the hardest part about making media like making movies?

JR7: Um, where to find stuff: like if you wanna find like um, for example copy, where you have to click, like if you have to go on start or stuff like that I find it really hard to find something, it's usually pretty long, and even though someone shows me, it takes me two or three times to actually, like remember, memorize it, so that's what I find pretty hard.

Her response is reminiscent of Rosalind Gill's (2007) notion of 'calculated ignorance,' this girl has an overall average of 88%, so there is no reason why she could not remember how to use the programs. It seems the problem has more to do with motivation than intelligence, and she is just not motivated in producing media (although she did a very good job at it, and managed one of the highest grades in the class). So why is it that girls still don't want to "do" wires even with lightweight cameras and digital editing equipment? I had to return to research these new patterns I saw developing.

Returning to the research literature

A major pattern that began to emerge was that of indifference toward computers found in many of the girls' views. The films, surveys, interviews and journals indicated girls' ability to learn the nuances of media production, but it was not appealing to many of the girls: it bored them, supporting the findings of Margolis, Fisher and Miller (2002) as depicted in an interview with a student in a university computer program:

> *"Everyone just said how boring it was. Who cares that computers did not benefit anyone? We like computers! We love computers! We know computers! And who cares about the rest of the world?" . . . And if you're trying to make something that's going to change the world, that's going to help the world, you have to have some sort of concern about what's your long-term goal. Not just to produce Word 8 . . . I don't know, or Excel . . . whatever. (laughs) How . . . how is this helping? Or is it helping? Like go see if that stuff is doing anything."*

This trend is found in several studies suggesting that male students had significantly more positive attitudes than female students with respect to student involvement, assessment, and perceived learning (Kay, 2007; Ogozalek, 1989; Robin, 2009). Boys see computers as a "toy" (Margolis, Fisher, and Miller, 2002) and girls don't.

What are some of the possible reasons for this general lack of interest? There are other forces at work and in grounded theory, it is necessary to return to research to investigate new issues that arise from the investigation. One of the possible causes for lack of interest is that girls perceive computers as "boy's toys."

Toys designed for boys have traditionally tended to be highly manipulative or electronic whereas "girls' toys are less manipulative and rarely have interchangeable parts" (Caleb, 2000; Sanders 1997). Sanders, Koch, and Urso (1997) assert that "girls who are not exposed to toys that encourage scientific, mathematical or technological thinking are less likely to develop an interest in related subject areas at school." The problem begins with the toys parents choose to let their children play with; setting in motion a phenomenon that predates school. Beckey Francis (1999) asserts that "by the age of seven children usually understand that sex is fixed and at this point they begin to refine and elaborate their understanding of gender issues" (p, 33), and further claims that children choose toys that identify their gender at an even younger age (pre-school).

Since the majority of video games are geared towards males, and playing games on a computer would lead to feeling of being at ease with computers as a tool, then it naturally follows that boys feel more comfortable with media production: "Unfortunately, the majority of today's games are aimed at a male market and in addition are not of particular interest to girls….Thus, in many cases a girl's first experience with a computer is a negative one and can turn her off of computing right from the start" (Gorriz and Medina, 2002: p. 42). Coupled with the fact that boys gravitate toward computer games and mechanical toys (Wilder, Marchie and Cooper, 1985), and the fact that educational research in Mathematics shows that adolescent girls avoid demanding situations while adolescent boys learn to deal with them (Campbell and McCabe, 1984), and we see a pattern of gendered differences beginning in childhood.

It may come down to games: early studies suggest that women are not encouraged to engage in fantasies of power or to develop control over objects, including computers (Ogozalek, 1989) and although the data indicates that girls are spending more time playing games on computers, there exists distinct differences in the patterns of play and the types of games girls

and boys play (Thornham, 2008). Girls typically play less than five hours gaming per week (substantiated in this studies surveys) while almost 45% of boys play more than ten hours a week. Time spent on computer games would indicate boys seeing this type of activity as desirable whereas girls do not, although as pointed out earlier, the gap between girls and boys in computer gaming (at least in this school) seems to be changing. Girls are not enthralled when it comes to ICT: Amelia does not dislike computers; she would just rather be doing something else:

> “The mass media has popularized a similar conception, the "toy/tool" dichotomy – the idea that boys and men see computers as toys to play with, while girls and women use them as tools to do things with. Whether these differences are fostered by parents and society or not, they are reinforced by many cultural and educational cues, all pointing to computing as a male domain. Unfortunately, they leave many women questioning whether computer science is a place for them, and wondering if their orientation will allow for comfort and success.” (Margolis, Fisher, and Miller, 2002)

Another possible reason that Amelia and the other girls would rather be doing something else is that the lack of strong female role models. It is believed by some experts to be yet another reason for the gender gap in technology use between males and females. Since mass media representation are the only view of media producers that students know, so part of any media curriculum should involve guest speakers of both genders: researchers suggest providing children the opportunity to see guest speakers from both genders in non-traditional careers (Swanson, 1999). Men feel a stronger sense of "belonging" in the computer field: as Ogozalek (1989) observed, “the absence of a social network may discourage some women” (p. 12), an issue also brought up earlier in this study.

When the girls were asked to participate in this apparently male world, they chose to do it on their own terms. I, as a male, taught media production the way I had learned (though many of my film teachers in college were women) and felt that the use of storyboards and traditional narratives were the "correct" procedure. They created a network of girl producers who discussed their work and networked (the girls seemed to take turns being interviewed in each others' videos) and in the initial stages of their film-making, some girls had already handed in storyboards for narratives, but suddenly changed their minds and switched to interviews. This was obviously based on discussions with their peers, and it seems that they decided the reflexive (though they did not use the term) was the way to go. The girls spent many hours on their films, and at least two of the girls returned to me at a later date to ask for copies of their films, indicating a certain amount of pride in their work, a pride I shared. They sought to make social statements ("why can't we bring someone from the outside to the Grad Shindig?), and sought to dispel stereotypes (*Breakfast club* video). The girls were able to excel because they were able to use computers to communicate and it became a focus of social interaction, possibly the "Rosetta Stone" of understanding how girls can become better versed in media production.

This notion is supported by a study by Margolis, Fisher, and Miller (2002) of women enrolled in computer courses in college in the U.S. Margolis found that women discussed the "Geek" culture they found themselves in and reported being more interested in the uses of computers or tools that could be used for social good rather than as objects of fascination or "hacking for hackings sake." (2002; p. 106). In a later work (2005) Margolis claims that more resources and more computers are not the solution, what is missing is resolve, and how better to give girls that resolve than to offer them media production as a source of networking and communication.

Another related problem outlined by Margolis, Fisher, and Miller (2002) was that many of the women surveyed felt that to be successful in computing (and this is also found in any form of media production), there is a potential loss of social interaction: a career in computing means a loss of other relationships[55]. Carol Fuller points to the notion "of a 'gendered habitus' and "their aspirations will reflect opportunities perceived as available to them in the labour market, alongside the gendered experience that shapes habitus." (Fuller, 2009; p. 27).

Fuller goes on to elaborate that the structure of the workplace "does not reward women," and although childcare should be a joint responsibility of both parents, women are aware that in practice this is not the case and aspirations are still constrained and limited by this understanding: "despite some ideological shifting, very salient within the aspirations and related future identities of young girls, defined as they are by a reflexive understanding of their gendered self" (Fuller, 2009; p. 28). They have yet to see media production as an identity available to them and those who are interested in science would often aspire for roles that have been presented as feminine, including medicine; shows such as *Grey's Anatomy* depict women in powerful positions and medicine as a viable career path

Fuller offers another possible answer to our query: the under-educated mothers struggling financially "serves as a powerful motivating factor in aspirations for higher education," and those mothers, "encouraged them to aim high and avoid the same fate." If mothers are both overtly and by example pressuring their daughters to "aim high," many of the careers associated with media production would not be appealing since many entry level positions in media (camerawork, editing) are not perceived as high status and higher level positions (directing, producing) offer long hours with no real compensation for motherhood.

[55] Margolis, Fisher and Miller found that part of the culture of working with computers in general involves a one focus obsession that girls do not always share: "the lifestyle is one in which hackers seem to spend nearly every waking hour at the computer, talking incessantly about computers, eating and sleeping in front of the computer . . . when women are introduced to [computers] in cultural contexts where the most successful users seem to 'love the machine for itself', they define themselves as relational women in terms of what the 'serious' computer users are not."

This is further marred by the fact that girls often have misconceptions about what is involved in media production ("it will hurt my eyes," or "because I am not a very good filmer" [sic]) and the use of computers (Sanders, 2002). Since media production often involves long hours on a computer, girls might perceive this type of work as "nerdy" and outside of the realm of possibilities. Sanders cites the Higher Education Research Institutes 2001 study which found those who work with computers were thought of as highly intelligent (brain surgery and rocket science) and "Women are half as likely as men to rate their computer skills as above average" and reported lowered levels of self-confidence in general (Sanders, 2002). Unaware that computer programs for video editing, web page design and other aspects of media production do not entail programming, many girls discount this type of work not realizing that the potential for flexible hours (helpful in juggling childcare with career) are increased in such careers.

Summary

It appears that the girls in this study were able to create media and follow criteria allowing them to create effective media texts, but their sense was that it was just another task to do while some of the boys found it "interesting" and "fun," supporting work by other researchers that boys perceive computers as toys and are willing to make these activities their social life. Women may also find this work interesting, but realize the kind of focused problem solving necessitated in media production might not conducive to a social life outside of the workplace and/or family life or as Jane so eloquently put it: "it's kinda boring."

Girls successfully create media text as outlined by the teacher, for a variety of reasons including the fact that they actually followed the instructions. This may explain why they are

more likely to score higher than the boys in their classes. It is most important however to note that when girls are given the opportunity to produce under their own terms (using reflexive interviews) and create social networks built around the production, they seem more likely to go beyond the expectations of the teacher and/or requirements of the course.

Chapter Seven: Findings, Conclusions and Recommendations

This chapter presents a summary of the findings, followed by a discussion of the study's results as related to the statement of the problem, purpose of the research, and the ensuing questions generated by Grounded Theory. Based on the analysis of data from Chapter Five and Six, specific conclusions are presented. Limitations of the research are then discussed, followed by recommendations for future research. The conclusions are the results of having collected and analyzed data using grounded theory allowing the data and my interpretations to generate theories. I then consulted the literature in order to challenge and redefine my theories.

Summary of Findings

Previous studies of girls in media have focused on the history of women in media, the importance of media production in students' learning (Buckingham, 1994), the culture surrounding higher level education of media production (Magolis and Fisher, 2002), the disparity of employment in the media production field (Deuze, 2006; Lauzen, 2006; Holzschlag, 2007), and patterns of girls media production in and out of school (Bloustien 2003; Kearney, 2006; Gill, 2007; Mitchell and Reid-Walsh, 2005). This study contributes to the body of scholarly knowledge by providing new findings that specifically outline how girls are drawn to a reflexive model when creating media production if given the freedom to do so and how this might be used to improve teaching, and give new insights into why girls find little interest in media production.

As mentioned earlier, in grounded theory researchers gather data, and then look for theory to emerge from the data. Both in conducting the research and again in analyzing the research later, I began to see certain patterns developing:

1) When given the choice, girls in this school chose the reflexive interview as a means of discussing their experiences (see Chapter Five). This partially answered the question "what choices that girls make during production might indicate a need for support in the production of media." Training in the reflexive interview might be useful in curriculum involving girls' production of film;

2) Although the girls spent a great deal of time and energy on the productions, preliminary notions about media production as a career did not change between the initial surveys, early journals, subsequent interviews, and final journals: although they understood media production better after having produced films, they generally did not find media production any more interesting as a field of study than before production. This answered one of my primary questions, "what are girls' attitudes towards gender and media production." Their general attitude (although there were some exceptions) was indifference, no myths, no fear or intimidation, just a general sense that media production was not particularly interesting. This tends to support the work of Cooper and Weaver (2003), as well as Handcock et al. (2004);

3) An analysis of the environmental text of film-making (Chapter Four can be added to John Fiske's (1987) idea of textual analysis which includes the primary text (the films produced) and the secondary texts (the producers themselves). While I do not go as far as I might with this analysis, a consideration of 'hallway culture' (the contextual factors in particular) might be added to Mitchell and Reid-Walsh's bedroom culture (2002) or Sefton-Green's (2000) notion of the digital bedroom as critical sites of media making.

A missing component of this framework, of course, is explicit attention to the idea of the audience text, and although I speculate on the idea of the girls producing texts to please (or comply with) the teacher (me), I do not explore other audiences. As a researcher, I came into this study with many questions. What were the girls' attitudes towards gender and media production? Why don't girls do wires when they are obviously so adept at media production? It is clear in the interviews and subsequent journals that the majority of girls do not find media production interesting: challenging yes, but not particularly interesting. It appears that the superior work created by the girls might be explained more easily by Fletcher's notion that "girls write to please the teacher," and many of the girls simply benefit from a society that rewards obedience (Lunsford, Andrea and Ruszkiewicz, 2000; Dinesh, 1991; Pauludi and Doyle, 1998): the girls are simply more fastidious in most school work after a lifetime of rewards for doing so.

However I also learned in my reviews of literature that gender differences begin before school, and that might give some insights into this particular issue: many of the girls claimed that creating media was difficult or "hard", but occasionally found it "interesting." Boys seemed to find media production "interesting" but also "fun," a term not used by the girls. This may be due to the nature of computing as the "the "toy/tool" dichotomy – the idea that boys and men see computers as toys to play with, while girls and women use them as tools to do things with" (Kantrowitz, 1994).

One of the great things about this form of research is the opportunities to discover things that you didn't set up to find: a more interesting outcome not being initially investigated was the discovery of a "hallway culture" and how the students reported on their own spaces within the school. The notion of hallway culture has been alluded to in certain works, and it certainly merits more investigation, offering useful insights into an altogether unexplored space, and who better

to report on it than the students themselves. Any teacher who has ever worked in a high school is aware of the social aspect of the hallway, but teachers either ignore it, or they try to "clean it up", acting as custodian and trying to reclaim it from the students, which is an impossible task.

The films that were created depict a space that is often scary and dangerous place where bullying and dissing take place (Jacobs, 2007), but the hallway culture in this school was generally depicted as a nurturing and a positive space. These films allowed me to be an 'accidental tourist' in a landscape that I (and most teachers) largely ignored. When students were asked to depict life at "West Island High", they inevitably ended up in the hallways (Julia took us from the classroom into the halls to guide us through her life, most of the interviews in Angela's Breakfast Club take place in the halls and Linda's video that ***is*** the halls); the hallway was how these students portrayed the school. The girls located their interviews there, but in some cases the girls were seen as invaders: "some people didn't want to take pictures of them or they noticed that we were trying to take unexpected pictures and started posing, so that was hard to get" (Julia, 10/27/08).[56]

Questions asked at the onset of this study such as how girls produce and what techniques might aid them in developing their skills were answered and discussed. How girls perceive media production as a field of study was also explored and it seems it generally does not interest them. Girls do not feel incompetent as media producers, but boys seem to feel more competent, and girls did seem to perceive media production as more technical, ignoring the communicative element until the advent of the reflexive interviews where they began to use (although not see it) as more communicative than technical. This attitude seems to be major point of contentions and must be addressed in future studies.

[56] Holloway and Valentine (2003) claim that "Children's identities are constituted in and through particular places and spatial discourses," (p. 8). This gave a clear example of the role space plays in the identity of these students.

How they produce was explored at length in chapter five in the discussion of reflexivity: girls like to interview (preferably other girls), and would benefit from any media production where communication is at the centre of the curriculum. This fits in well with the philosophy of the QEP, and if applied properly, this approach to media as merely a form of communication could serve as a means to reduce girls' general apathy towards media production. Girls have more positive attitudes towards technology when it is related to communication (Hollaway and Valentine, 2003: Jenkins 2006, 2006), evidenced by the fact that the girls in this study spent more than 50% of their time on computers communicating via social networking and IM. Furthermore, in this age of convergence, it is possible that new forms of production (computers the size of cell phones as in the case of I-phones with graphic interface) may actually appeal to girls who will not see them as "boring" and certain aspects of "slasher" and other forms of "Participatory Culture" might facilitate girls entrance into media production via Participatory Culture, an aspect of media production so far not explored at any length.

According to Jenkins' (2005) white paper *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century,* participatory culture is a culture consisting of relatively low barriers to artistic expression and civic engagement, with strong support for creating and sharing one's creations with others. It also involves some type of informal mentorship whereby what is known by the most experienced is passed along to novices, and more importantly it consists of an environment where members believe that their contributions matter and feel some degree of social connection with one another. Much of the training taking place is peer based, and self motivated and if teaching media production could be adapted to take these features into consideration (as well as including teaching the ethics of media production), where students are rewarded for their contributions rather than seeing it as an "add-on" to

traditional curriculum, there is a possibility to take advantage of girls' interest in participatory culture to develop new curriculum.

Limitations of the study

In offering a section called 'limitations' I am at the same time acknowledging that in a sense the limitations of the study are also really another set of findings and I present them in that spirit. As mentioned earlier, the role of being both teacher and researcher simultaneously limits and enables this research, but there are other factors that affect transferability as outlined by Guba and Lincoln (1994). The first limitation of this study was the population, the participants themselves and the possibilities of generalizing the findings. This is an upper-middle class school with the average family income twice that of the national average and the students who participated in this study were strong students (overall average of 82.5%). This does not translate well into generalized findings across a broader population, and only presents a vision of students with strong academic ability within an upper middle-class environment.

A second limitation is that the students were in the class of the researcher, and being both researcher and teacher (for me) had its own limitations. As noted in Chapter Five, often the study had to match the curriculum requirements of the Ministry and/or school board, and not the other way around. As well, my own enthusiasm and attitude towards media production (as well as sub-conscious cues that may have influenced students' behaviour/ expectations) might have had an influence on the findings. I cannot ignore the fact too that I am a male teacher and my focus was

female students. Were there other 'gender dynamics' at play that I was not aware of? Would the study have been even more interesting had the teacher been a woman?[57]

This points to a nexus of reflexivity at play in this study, and some of it might be considered as a type of confounding factor. There are two types of reflexivity referred to in this study: 'Personal reflexivity' involves reflecting upon the ways in which our own values, experiences, interests, beliefs, political commitments, wider aims in life and social identities have shaped the research. It also involves thinking about how the research may have affected and possibly changed us, as people and as researchers. 'Epistemological reflexivity' requires us to engage with such questions such as the following: How has the research question defined and limited what can be 'found?' How has the design of the study and the method of analysis 'constructed' the data and the findings? How could the research question have been investigated differently? To what extent would this have given rise to a different understanding of the phenomenon under investigation? "Epistemological reflexivity encourages us to reflect upon the assumptions (about the world, about knowledge) that we have made in the course of the research and to think about the implications of such assumptions for the research and its findings" (Willig, 2001; p. 10). I feel that some of these questions were not sufficiently addressed in this study and might make interesting subjects for future studies.

Another limitation was the way in which the film topics were dictated to the students: the most interesting work came from the senior girls in term two when they were given more freedom to choose the method of telling their stories. The junior students were never given that opportunity (see chapter six) so that limited the analysis to the work of the seniors, although the juniors did contribute some interesting findings concerning attitudes towards computers.

[57] There actually was another computer teacher, a woman, and her experiences with girls excelling in the computer classroom were identical.

There was of course the problem of my interpretations of the girls' productions. Because I am not female, I perhaps cannot truly appreciate their texts. I might be empathetic to the challenges experienced by girls and women, but I cannot truly understand what it is to be a teen-age girl. I wonder how much of my interpretations were skewed by this, and wonder if it is possible for any male to read the work of any female (or vice versa) in the sense that it was intended. Still, I interpreted as best I could assisted by their journals and interviews, and in some cases by informal conversations with the producers.

A final and possibly the most frustrating of this study's limitations (for me) is that the survey population was out of school by the time the data had been analyzed and there was no opportunity for me to encourage the students to participate in the actual project (and in two cases to complete the surveys) or to follow-up later, which would have been very useful, giving greater insights into changes in attitudes and new questions that came up in the analysis. If I were to do a similar study in the future, I would definitely allow for post study interviews. As there was no motivation or inducements to participate, out of a potential pool of 117 students for this study, only thirteen girls and four boys returned the consent forms, regrettable because some of the students not included produced fascinating work and would have made the findings more interesting.[58]

This field of study is an extremely fluctuating one due to the nature of digital technology and the speed at which technology changes and improves. Moore's Law (Moore, 1965) of eighteen months between the doubling of memory, speed and pixel rates makes studying media production suffer the same fate as creating software: by the time it is published, it is obsolete.

[58] Lack of handing in permission forms was not the only limitation: in two cases students participating did not take part in interviews, evading requests to meet with me, which was difficult to enforce since the study was voluntary.

Works such as Livingston's *Young People and New Media* (2002) and Holloway and Valentine's 2003 *Cyberkids* point to disparities between girls' and boys' use of the Internet that simply no longer exist. According to findings on the World Internet Project (2009), disparities by gender in web use in the UK are no longer significant, as is the case in Canada where disparity by income still exists (88% use among those incomes that exceeded $86,000 versus 61% for those whose incomes were below this level), gender differences were insignificant[59] with girls (youth sample) accounting for 48.3% of all users versus 51.6% for boys and almost identical findings existing in adult samples (2009).[60]

Much of the groundbreaking work in this field has shifted as quickly as the speed of computers: the advent of "drag and drop" website technology has led to the proliferation of "Fan sites" cited in Jenkins (2006), and the bedroom sites discussed in Mitchell and Reid-Walsh's (2002) and Weber (2006) and other earlier works have evolved as those girls have grown up and found new interest. Culture adaptation to technology changes as quickly as the technology itself, so that by the time this study is published, some of the work will be rendered obsolete.[61]

Finally, as mentioned earlier, so much unexpected information was generated by the girls' films, that I was scarcely able to deal with it. I set out to explore a question (why don't girls do wires) and found answers and directions (including the importance of teaching reflexivity and the interview for film making), but I was also presented with a gift: through their films the girls offered me an insight into their realities which I could not have possibly imagined. By the fact

[59] Differences were no longer how many females used the net, but rather what they access: females were more likely to search form information about health while men were more likely to search for information about government (StatsCan, 2006).

[60] Even the Kaiser Institute Report's 2004 findings that Internet use in the U.S. at 74% is now disputed by the World Internet Project (WIP) which puts the number at 88% for 2008. WIP reports Internet use at 98% in the UK, and 95% in Canada Tufekci, Z. Cotton, S. and Flow-Delwiche, E. (2008).

[61] In the course of this work, one of the references to disparity in gaming habits between girls and boys was bought into dispute by one of my advisors who found differences were being reduced with the advent of more girl-friendly games.

that I asked girls to show me their lives as a means of creating content for their videos (the crux of my study), I opened a digital Pandora's box: they gave me a view of adolescent girls' culture that most can never aspire to see but their work was so rich that I could not possibly give it the attention it merited. Bloustien stated in her study (one where she ***sought*** to discover hidden worlds: "their perceptions of their worlds as they articulated, or failed to articulate them, the everyday lived experiences of ten teenage girls were explored through their own eyes" (2003; p. 9). As mentioned earlier, I was an accidental tourist in a world that I never expected to see, like coming across some scenic vista when lost in some side road and you look up from the map to see one of the most amazing sunrises in a valley you couldn't find on the map if you wanted to.

I was headed for Kansas and found myself in Oz; a world I scarcely knew existed. Had I assigned some teacher directed task (which I did three out of four terms), I never would have found the reflexive nature of girls when creating film. However, I would not be so regretful that I could not spend the time needed to explore the world they allowed me to see, one I would like to go back to some day.

Then again, perhaps I should have focused not on the students' productions, but rather on my own experiences as a teacher/researcher as a truly reflexive study rather than reporting on the reflexivity of others. There is more than enough to write on the complexities of engaging in such a study and the complexities of self-discovery, and I did learn a great deal about the perils of action research and the pitfalls of being both a teacher and researcher since at times the requirements of one role creates ethical dilemmas for the other. Due to the increase in the number of action research projects where the teacher is the researcher, it might be prudent for reflexive studies to examine the trappings of such work and attempt to create a template, or at least a guide for those venturing into such projects.

Implications of the Study

This study indicates that a major issue facing all girls' media production in school is that media production often follows a male structured curriculum where traditional narratives are requested and where girls do not have the freedom to follow their natural inclination to conduct reflexive interviews. It is possible that given the opportunity to create their own stories, girls might choose the reflexive more often. This also indicates a need to teach the reflexive interview more intensively before beginning production and perhaps adding an overview of reflexive interview techniques as outlined in Trihn (1991), Denizin (2002) and Rouch (2003).

It also validates the finding of Magolis et, al (2004) and Handcock, 2004) gender disparities in attitudes towards computing, and since most New Media is created on computers, this problem of the toys/tools dichotomy will serve to accentuate the gender disparity in the media industry outlined by Kearney (2006), Deuze (2006), Lauzen (2006), Holzschlag (2007), and others. More research has to take place in methods of reforming both the educational system and girls' attitudes towards computers.

It was initially disappointing that the girls in my study were not interested in entering the field, but I console myself with the thought that many of the skills they developed are not unique to media production and have applications elsewhere. To start with, just the designing, planning, carrying out and evaluation of a major project is a skill that has use in just about any career choice these girls make. Some girls mentioned the fact that organizing the shooting was challenging and they learned strategies to deal with problems as they appear. They learned how to schedule time and had to rely on others and at times manage groups of peers for shoots, a skill that will serve them well in their future endeavors, no matter what they might be.

Recommendations

While not all studies need to end with recommendations, my 'teacher hat' begs me to consider a set of recommendations. Three recommendations for future research come to mind: first, the notion that girls are reflexive in nature and that this might be used as a means to increase their interest in media production in highs school should be explored. A qualitative study following this one might be undertaken where both girls and boys would be taught anthropological film-making techniques (as well as others) to see if the girls desire to create this genre of film would be replicated and if initial training in the reflexive interview would alter/improve the types of films being made. This could give researchers and educators new insights into how to teach media production to girls.

A second idea that must be explored is the notion that girls might have not "discovered" technology as a possible career path. It is possible that girls simply haven't discovered media production just as they hadn't considered medicine thirty year ago[62]. A statistical study of girls' participation in medical programs could be undertaken and a parallel study indicating any increase in women's participation in media production could be made to check for any possible convergences.

Another possible line of study would be a qualitative analysis of media production as a method of social networking for girls, and how participation (girls acting or being interviewed in other girls' films) in classroom media productions affects or is affected by social status. This study could address the question "does participation in each other's films recognize their existing status or are they creating status through media production."

[62] Ironically, two of the girls in the study cited wanting to go into medicine as reason to not go into media production.

Yet another would be to ask the girls how they would prefer to be taught. This would be preceded with a fundamental background in film being offered, than surveys and interviews to gain insights into how girls and boys would like to be taught. With this information it might be possible to custom build curriculum based on the desires of the students. It would be most interesting to see if the girls and boys demonstrated differences in the approaches they preferred or if in many ways they want to be taught using the same approach.

Finally, at the expense of sounding like a broken record, the insights that can be gained by allowing girls (and boys) to tell their stories through reflexive film cannot be understated: using the methods outline by Bloustien (2003) and Chin (2007) of allowing children and young people to become producers of their own films telling their own stories is immeasurable. There is already a tradition of women using photography to tell their stories (Walsh, 2005), particularly with the methodology of "Photo-voice" (Moletsane et al, 2008), and participatory video (Moletsane et al, 2008), and now with the advent of cheap, lightweight user friendly video camera and video equipment, there has never been a better time to create a new generation of film makers. This new generation of film makers will not only be adept at "doing wires," but also creating a "heightened self consciousness" (Bloustien, 2003). Such work could be consumed by the producers themselves as well as viewers who might find such text useful in negotiating girls' spaces.

REFERENCES

Absi-Semaan, N. (1993). Masculinity and femininity in middle childhood: Developmental and factor analyses. *Sex Roles*. 28 (3-4).

American Association of University Women Educational Foundation Commission on Technology, Gender, and Teacher Education. (2000). *Tech-Savvy: Educating Girls in the New Computer Age*. Washington, DC: American Association of University Women Educational Foundation.

Anderson, G., and Arsenault, N. (1998). *Fundamentals of educational research.* (2nd ed.). London: Falmer.

Aronowitz, S. and Giroux, H. (1991). *Education Still Under Siege.* ONT: OISE Press.

Aronowitz, S. and Giroux, H. (1985). *Education Under Siege: The Conservative, Liberal and Radical Debate Over Schooling.* Mass: Bergin and Garvey Publishers.

Agosto, D. Girls and Gaming: A Summary of the Research with Implications for Practice. *Teacher Librarian*. Volume 31, Number 3, February 2004.

Bandura, A. (2002). Social cognitive theory of mass communications. In J. Bryant, and D. Zillman (Eds.). *Media effects: Advances in theory and research* (2nd ed.). NJ: Erlbaum.

Bickner, C. (2007). *Down By Law*. Closing the Digital Divide. [On-Line] Available: http://www.alistapart.com/articles/downbylaw/

Bielby, D. and Harrington, M. (2005). Opening America. The Telenovela-ization of U.S. Soap Operas. *Television and New Media*, Vol. 6, No. 4, 383-399

Bloustien, G. (2003). *Girl Making: A Cross-Cultural Ethnography on the Processes of Growing Up Female*. New York, Oxford: Berghahn.

Boyer, M. and Laberge, M. (2008). Portrait of High Schools in Quebec 2008. Montreal Economic Institute. [On-Line]. Available:http://www.iedm.org/uploaded/pdf/portrait08_en.pdf

Buckingham, D. and Sefton-Green, J. (1994). *Cultural Studies goes to school: Reading and Teaching Popular Culture*. Bristol, Pennsylvania: Taylor and Francis.

Buckingham, D., Grahame, J. and Sefton-Green, J. (1995). *Making Media: Practical Production in Media Education*, London: English and Media Centre.

Buckingham, D. (1998). *Teaching Popular Culture: Beyond Radical* Pedagogy (ed.) UK: Routledge.

Buckingham, D. (2003). *Media education: Literacy, learning, and contemporary culture*. Cambridge, UK: Polity Press.

Bull, G., Gollasch, F. Ed. (1986). Talking Your Way into Meaning: Developing Specific Writing Abilities through Talk. *Reading Around Series No. 4.*

Caleb, L. (2000). Design technology: Learning how girls learn best. *Equity and Excellence in Education,* 33(1), 22–25.

Campbell, P. and McCabe, G. (1984). Predicting the Success of Freshmen in a Computer Science Major, *Communications of the ACM* 27, 11 (November):1108-1113.

Chin, E. (2007). Power-puff Ethnogrphic/guerrilla Research. In A. Best (Ed.) *Representing Youth: Methodological Issues in Critical Youth Studies.* New York, New York University Press.

Comstock, G., and Scharrer, E. (2005). *The Psychology of Media and Politics*. San Diego, CA: Elsevier/Academic Press.

Comstock, G., and Scharrer, E. (2007). *Media and the American Child*. San Diego: Elsevier/Academic Press.

Cooper, J. and Weaver, K. (2003), *Gender and Computers: Understanding the Digital Divide*, Lawrence Erlbaum Associates.

Creswell, J. and Miller, D. (2000) Determining Validity in Qualitative Analysis. In *Theory into Practice*/ summer 2000. p. 126-129. [On-Line]. Available: http://www.medicine.usask.ca/family/research/manuals/qualitative-research/Validity%20in%20Qual%20Rch.pdf

Cuban, L. (2001). *Oversold and Underused: Computers in the Classroom*. Cambridge MA: Harvard University Press, 1-20; 176-197.

Davis, G. (2007). *National Conference for Media Reform*. [On-Line]. Available: http://www.democracynow.org/2007/3/8/actor_geena_davis_on_her_quest

Denzin, N. (2002). Cinematic Society and the Reflexive Interview. In J. F. Gubrium and J.A. Holstein. (Eds.). *Handbook of interview research: context and method.* Thousand Oaks, CA: Sage.

Deuze, M. (2006). Ethnic media, community media and participatory culture. *Journalism Journal*, volume 7, Number 3, 262-280.

Diaz, J. (March 18, 2009) *The rise of the anchorwomen: Viewer attitudes, economics lift young female newscasters.* [On-Line]. Avalable:

http://www.boston.com/news/local/massachusetts/articles/2009/03/18/the_rise_of_the_anchorwomen/

Dick, B. (2005). *Grounded theory: a thumbnail sketch.* [On-Line]. Available: http://www.scu.edu.au/schools/gcm/ar/arp/grounded.html

Doucet, A. (Coordinator for Evaluation of English Language Arts, MELS). Personal communication, March 18, 2007.

Duncan, B., Anderson, N., Boles, D., Cole, S. Al Emid, Flynn, E., Fowlie, J., Goller, C. Shappard, R., mart, B. and Wheeler, W. (1989). *Media Literacy -Resource Guide.* Toronto: Ministry of Education, Toronto.

Duncan, B., D'Ippolito, J., Macpherson C, and Wilson, C. (1996). *Mass Media and Popular Culture* (Version Two). Toronto: Harcourt Brace.

Eagly, A. and Johnson, B. (1990) Gender and leadership style: A meta-analysis. *Psychological Bulletin*, **108**, 233-256.

Eagly, A. H., and Karau, S. J. (2002). *Role congruity theory of prejudice toward female leaders*. Psychological Review, 109, 573-598.

EKOS Research Associates (2004). *Frame Work: Employment in Canadian Screen-Based Media* [On-Line]. Available: *A National Profile* http://www.culturalhrc.ca/research/Framework_-_Employment_in_Canadian_Screen-Based_Media_-_A_National_Profile-en.pdf

Fallows, D. (2005). How Women and Men Use the Internet. Pew Internet and American Life Project, [On-Line]. Available: http://www.pewInternet.org/Reports/2005/How-Women-and-Men-Use-the-Internet.aspx, accessed on May 10, 2009.

Faludi, S. (1991). *Backlash: The Undeclared War against American Women in 1992.* London, Crown Publishers.

Ferdov, A. Media Education in Russia. UNESCO Moscow. [On-Line]. Available: Office.http://www.unesco.ru/eng/pages/bythemes/stasya18022005145853.php

Fletcher, R. (2006). *Boy Writers: Reclaiming their voices.* Markham ONT: Pembroke Publishers.

Finlay, L. (2003). The reflexive journey: Mapping multiple routes. In L Finlay and B Gough (Eds.) *Reflexivity: A practical guide for researchers and health and social sciences.* Oxford: Blackwell Science Ltd.

Fiske, J. (1987). *Television Culture*. London: Routledge. [On-Line]. Available: http://www.questia.com/library/book/television-culture-by-john-fiske.jsp

Fiske, J. (1989). *Understanding popular culture*. Boston: Unwin Hyman.

Foucault, M. (1995). *Discipline and Punish: The Birth of the Prison*. NY: Vintage Books.

Friedan, B. (1963). *The Feminist Mystique.* New York: W.W. Norton and Company.

Fuller, C. (2009). *Sociology, Gender and Educational Aspirations: Girls and their Ambitions*. London: Continuum International Publishing Group.

Functionalism (Architecture). (2008, July 22). In *Wikipedia, the free encyclopedia*. Retrieved March 10, 2009, from http://en.wikipedia.org/wiki/Functionalism_(architecture).

Gailey, C. (1996). Mediated messages: Gender, class, and cosmos in home video games. In P. P. Greenfield & R. Cocking (Eds.), Interacting with video. New York: Greenwood Publishing Group.

Gibbons, S. (2009). Media Report to Women. [On-Line]. Available: http://www.mediareporttowomen.com/statistics.htm

Gibson, W. (1984). *Neuromancer*. New York: Ace Books

Gill, R. (2007). *Gender and the Media.* Malden MA; Polity Press.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Cambridge, MA: Harvard University.

Glaser, B. G. (Ed). (1995) *Grounded theory 1984-1994, Volume 2*. Mill Valley, Ca: Sociology Press.

Gonick, M. (2005). "From Nerd to Popular? Re-figuring school Identities and Transformation Stories." In Mitchell, C. and Jacqueline Reid-Walsh. *Seven Going on Seventeen: Tween Studies in the Culture of Girlhood.* New York: Peter Lang.

Gordon, A., Gordon, M. and Moore, E. (2003). *The Gates legacy*. Library Journal, 128:4, pp. 44-48.

Gorriz, C., & Medina, M. (2000). Engaging girls with computers through software games. *Communications of the ACM*, 43, pp. 42-49.

Gouvernement du Québec, Ministère de l'Éducation. (1979). *The Schools of Quebec*: Policy Statement and Plan of Action. Gouvernement du Québec.

Gouvernement du Québec, Ministère de l'Éducation. (1980). *Secondary English Language Arts I to V Program*. Gouvernement du Québec.

Gouvernement du Québec. (2004). Commision des programmes d'etudés. Québec Education Program; Secondary School Education, Cycle One. Retrieved March 17, 2007 from http://www.csrs.qc.ca/triolet/proj/pgm/chapitre45.pdf

Gouvernement du Québec, Ministère de l'Éducation, du Loisir et du Sport. (2006 a). Scales of Competencies. Bibliothèque et Archives nationales du Québec.

Gouvernement du Québec, Ministère de l'Éducation, du Loisir et du Sport. (2008). *Secondary English Language Arts, Cycle Two*. Bibliothèque et Archives nationales du Québec.

Gray, J.B. (2005, August 08). Sugar and Spice and Science: Encouraging Girls Through Media Mentoring *Current Issues in Education*, *8*(18). [On-Line]. Available: http://cie.ed.asu.edu/volume8/number18/

Grossberg, L. (ed.). *Cultural Studies*, Volume 8, No. 2 (May 1994). [On-Line]. Available: http://books.google.ca/books?id=OoSs_16UaVYCandpg=PA316andlpg=PA316anddq=normative+reflexivity+grossbergandsource=blandots=wa6q9az86yandsig=vKC7mtPqVaHRKMzOF8LizfoHyisandhl=enandei=w0u5Sq6qFNmx8Qai_fmeDwandsa=Xandoi=book_resultandct=resultandresnum=1#v=onepageandq=normative%20reflexivityandf=false

Guba, E. G. and Lincoln, Y.S. (1994). Competing paradigms in qualitative research. In Denzin and Lincoln (Eds.) *Handbook of Qualitative Research*, pp. 105-117.

Haig, B. D. (1995). Grounded theory as scientific method. *Philosophy of Education.* [On-Line]. Available: www.ed.uiuc.edu/EPS/PES-yearbook/95_docs/haig.html

Haraway, D. (1985). *Simians, Cyborgs and Women: The Reinvention of Nature*. New York; Routledge.

Haraway, D. (1997). *Modest_Witness@Second_Millennium.FemaleMan©Meets_OncoMouse™: Feminism and Technoscience.* New York: Routledge.

Hagedorn, R. (1980). *Sociology.* Toronto: Holt, Rienhart Winston of Canada Limited.

Haughton, E. (2002, March 5). *The Guardian*. Gender split: Why do most girls turn their backs on computers when they leave primary school? [On-Line]. Available: http://www.guardian.co.uk/education/2002/mar/05/itforschools.schools

Heath, J. and Potter, A. (2004). *The Rebel Sell: Why the culture can't be jammed*. New York: Harper Collins.

Hobbs, R. (2006) *Multiple Visions of Multimedia Literacy: Emerging Areas of Synthesis*. [On-Line]. Available: www.reneehobbs.org/renee's%20web%20site/Speeches/Hobbs,%20Technology%20and%20Literacy,%2012.3.04.doc

Hobbs, R. (Ed.). (2007). Reading the Media in High School. In *Reading the Media* (pp. 3-18). New York and Newark, DE: International Reading Association

Holloway, S. and Valentine, G. (2003). *Cyberkids*. London: Routledge.

Holzschlag, M. (2007). Princess to Goddess. *Women in Technology*. [On-Line]. Available: http://www.oreillynet.com/pub/a/womenintech/2007/09/18/from-princess-to-goddess-female-success-in-it.html

Ickes, J. and Graham, T. (1997).When women's intuition isn't greater than men's. In *Empathic Accuracy*. W. Ickes. (Ed.) (1997). *Empathic accuracy*. New York: Guilford Press.

IMbD. (2009). Box Office MOJO. [On-Line]. Available:http://www.boxofficemojo.com/

Information and Communications Technology Council. *Women in ICT* .On-Line]. Available: http://www.ictic.ca/en/Content.aspx?id=1728andterms=Women+in+ICT+Action+Report

Jurkowitz, M. (August 27, 2003). More women in journalism school doesn't translate to Jobs. *The Boston Globe*. (Boston, MA).

Jacobs, J. (2007). *Our School The Inspiring Story of Two Teachers, One Big Idea, and the School That Beat the Odds*. Toronto: Palgrave Macmillan.

Jenkins, H., Puroshotma, R., Clinton, K., Weigel, M., and Robison, A. J. (2005). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*, [On-Line]. Available: http://www.newmedialiteracies.org/files/working/NMLWhitePaper.pdf.

Jenkins, H. (2006). *Fans, Bloggers and Games: Exploring Participatory Culture.* New York: New York University Press.

Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide.* New York: New York University Press.

Johansson, T. (2007). *The transformation of Sexuality*. [On-Line]. Available: http://books.google.ca/books?id=XPm3JEiunnsCandpg=PA119andlpg=PA119anddq=normative+reflexivityandsource=blandots=a8NaUsHAZGandsig=HAtcnzebTwD2z89Jr2EpbM4Z5W4andhl=enandei=oEpCStSIM5uetweI3MCpCQandsa=Xandoi=book_resultandct=resultandresnum=1

Johnson, M. (2006). Introduction. In M. Fox, D. Johnson and S. Rosser (Eds.). *Women, Gender and Technology*, Ill: University of Illinois Press.

Kantrowitz, B. Men, Women and Computers. *Newsweek*, 123 (20), May 16, 1994: 48-55.

Kaiser Foundation. (2005). Generation M: Media in the Lives of 8-18 Year-olds. [On-Line]. Available: http://www.kff.org/entmedia/upload/Executive-Summary-Generation-M-Media-in-the-Lives-of-8-18-Year-olds.pdf

Kay, R. H. (2009). Examining gender differences in attitudes toward interactive classroom communications systems (ICCS). *Computers and Education*, *52*,730-740.

Kearney, M. C. (2006). *Girls Make Media*. New York: Routledge.

Keyes, S. (1984) Measuring sex-role stereotypes: Attitudes among Hong Kong Chinese adolescents and the development of the Chinese sex-role inventory. *Sex Roles*. 10(1-2)

Kinach, B. (1995) Grounded Theory as Scientific Method: Haig-Inspired Reflections on Educational Research Methodology. *Philosophy of Education.* [On-Line]. Available: http://www.ed.uiuc.edu/EPS/PES-Yearbook/95_docs/kinach.html

Klein, M. (1997). Duality and Redefinition: Young Feminism and the Alternative Music Community. *Third Wave Agenda: Being Feminist, Doing Feminism*. Leslie Heywood and Jennifer Drake, eds. Minneapolis: University of Minnesota Press, 207-225.

Kress, G., Jewitt, C., Ogborn, J. and C. Tsatsarelis (2001). *Multimodal Teaching and Learning: The Rhetorics of the Science Classroom*. London and New York: Continuum.

Kress, G. and van Leeuwen, T. (2001). *Multimodal Discourse*. London: Edward Arnold.

Lankshear, C. (1997). *Changing Literacies*. Buckingham: Open University Press. [On-Line]. Available: http://archives.cbc.ca/ACT-1-69-1192/life_society/women_programming/educational_activities/

Lauzen, M. M. (2005). The Celluloid Ceiling:Behind-the-Scenes Employment of Women in the Top 250 Films of 2004., [On-Line]. Available: http://www.films42.com/feature/Lauzen-2005.asp

Lauzen, M. M., Dozier, D. M., and Cleveland, E. (2006). Genre matters: An examination of women working behind the scenes and on-screen portrayals in reality versus scripted prime-time programming. *Sex Roles*, 55(7-8), 445-455.

Lauzen, M. M., Dozier, D. M., and Bradley, R. (2004). Evening the score in prime time: The relationship between behind-the-scenes women and on-screen portrayals in the 2002-03 season. *Journal of Broadcasting and Electronic Media*, 48(3), 484-500.

Lauzen, M. M., and Dozier, D. M. (2002). You look mahvelous: An examination of gender and appearance comments in the 1999-2000 prime-time season. *Sex Roles*, 46(11/12), 429-437.

Leinonen, T. (2006) Critical history of ICT in education - and where we are heading? [On-Line]. Available: http://flosse.dicole.org/?blog=flosseposse

Amanda Lenhart, A. (2008), Teens, Video Games and Civics. PewInternet [On-Line]. Available: http://www.pewinternet.org/Reports/2008/Teens-Video-Games-and-Civics.aspx?r=1

Lister, M., Dovey, J., Giddings, S., Grant, I., Kelly, K. (2003). *New Media: A Critical Introduction*. Routledge, New York

Livingstone, S. (2002). *Young People and New Media*. London: Sage Publications.

Luke, A. (2005). What Happens to Literacies, Old and New When They're Changed to Policies? In *Adolescents and Literacies in a Digital World.* D. Aleverman (Ed.). New York: Peter Lang Publishing.

Luke, C. (2005). Re-crafting Media and ICT Literacies. In *Adolescents and Literacies in a Digital World*. D. Aleverman (Ed.). New York: Peter Lang Publishing.

Lunsford A., Andrea and Ruszkiewicz J. (2000). *The Presence of Others.* Third Edition. New York: Bedford/ST. Martin's.

Margolis, J., Fisher, A. and Miller, F. (1998). Computing For a Purpose: Gender and Attachment to Computer Science. *Women in Computer Sciences: Closing the Gender Gap in Higher Education.* [On-Line]. Available: http URL http://www.cs.cmu.edu/~gendergap/working.html.

Margolis, J., Fisher, A. and Miller, F. (2002). *Caring About Connections: Gender and Computing*. [On-Line]. Available: http http://www.cs.cmu.edu/afs/cs/projectgendergap/222/papers/anaomySQ99.html

Margolis, J. and Fisher, A. (2002). *Unlocking the Clubhouse/women in computing*. Massachusetts Institute of Technology: MIT Press, Cambridge.

Macdonald, M. (2003). *Exploring Media Discourse*. Thousand Oaks, CA: Sage Publications, 75.

McLuhan, M. (1951). *The Mechanical Bride: Folklore of Industrial Man*. New York: Vanguard Press.

McLuhan, M. (1967). *The Medium is the Massage: An Inventory of Effects*. With Quentin Fiore and Jerome Agel. New York: Bantam.

McMahon, B. and Quin, R. (2008). *Advancing English skills with film studies*. Marrickville, N.S.W. :Science Press.

Manieri-Elia, M. (1996) *Louis Henry Sullivan*. [On-Line]. Available: http://books.google.ca/books?id=Qx7x_lm3IWoCanddq=Louis+Sullivan+bibliographyandprintsec=frontcoverandsource=blandots=u0PtkFxjYLandsig=QasDyzXKDGvVYz8Efbjx1FrO4v0andhl=enandei=0NS4SpnSNdKvlAeygeXHDgandsa=Xandoi=book_resultandct=resultandresnum=5#v=onepageandq=Louis%20Sullivan%20bibliographyandf=false

Martinson, A.M. (2006). Designing Gender-Sensitive Computer games to close the gender gap in Technology. In Bystydzienski and Bird (Eds), *Removing Barriers: women in academic science, technology, engineering, and Mathematics.* Indiana: Indiana University Press.

Marx, K. *Das Kapital.* (1867). (translated Samuel Moore and Edward Aveling - edited by Frederick Engels) [On-Line]. Available: http http://www.marxists.org/archive/marx/works/1867-c1/index.htm

Masterman, L. (1985). *Teaching the media*. London: Comedia.

Medi-lexicon International. The gender gap closes in Canadian medical schools. Medi-lexicon International. [On-Line]. Available: http http://www.medicalnewstoday.com/articles/7916.php (Accessed November, 2008)

Merriam-Webster's Collegiate Dictionary (10th ed.). (1993).Springfield, MA: Merriam Webster.

Mitchell, C. and Reid-Walsh, J. (2002). *Researching Children's Popular Culture: cultural spaces of childhood*. London and New York: Routledge.

Mitchell, C. and Larkin, J. (2004). *Artful engagement: Using photo-voice approaches to disrupt the silences around sexuality and HIV/AIDS*. The International Conference on Pleasure and Danger Revisited: Sexualities in the 21st Century, Cardiff, UK, June.

Mitchell, C. and Weber, S.J. (1995). *That's Funny You Don't Look Like A Teacher!" Interrogating Images, Identity, and Popular Culture.* London: Routledge.

Mitchell, C. and Reid-Walsh, J. (2005). *Seven going on Seventeen: Tween Studies in the culture of Childhood*. New York: Peter Lang.

Moletsane, R., Mitchell, C., Stuart, J., Walsh, S. & Taylor, M. (2008) *Ethical issues in using participatory video in addressing gender violence in and around schools: the challenges of representation*. (Paper presented at the Annual Meeting of the American Educational Research Association, New York City, 24-28 March).

Moletsane, R. Mitchell, C. Smith, A. and Chisholm, L. (2008). *Methodologies for mapping a Southern African Girlhood in the Age of AIDS*. New York: Sense Publishers.

Moore, G. E. (1965). Cramming more components onto integrated circuits" (PDF). Electronics Magazine. pp. 4. [On-Line]. Available: ftp://download.intel.com/museum/Moores_Law/Articles-Press_Releases/Gordon_Moore_1965_Article.pdf.

Moss, G. and Gunn, R. (2009). Gender differences in website production and preference aesthetics: preliminary implications for ICT in education and beyond. *Behaviour and Information Technology.*19 February 2009 (1362-3001)

Mulvey, L. (1989). *Visual and other pleasures*. Bloomington and Indianapolis: Indiana University Press.

Mumtaz, S. (2001). Children's enjoyment and perception of computer use in the home and the school. *Computers & Education*, 36, 347-362.

NITA. Falling Through the Net, Toward Digital Inclusion. [On-Line]. Available: http 2001. http://search.ntia.doc.gov/pdf/fttn00.pdf)

Ogozalek, V. (1989). SIGCSE Bulletin vol. 21 No. 2 June 1989.

Orwin, A. and Carageorge, A. (2001).The Education of women in film production. *Journal of Film and Video*. Englewood. 53.1. Spring 2001. p. 40-51.

Pauludi, R. and Doyle, S. (1998). *Sex and Gender: The Human Experience.* The McGraw-Hill Company, Fourth Edition.

Peters, B. (1999). The Varied Pace of Women's Progress. [On-Line]. Available: http http://www.nieman.harvard.edu/reports/01-4NRwinter/97-99.pdf

Piaget, J. (1951). *Play, Dreams and Imitation in Childhood.* London: Routledge and Kegan Paul Ltd.

Powlishta, K.K. (1995) Gender bias in children's perceptions of personality traits. *SexRoles.* 32(1-2).

Pungente, J. (2007). The Second Spring: Media Literacy in Canada's Schools. *Media Literacy Review.* Center for Advanced Technology in Education - College of Education, University of Oregon. [On-Line]. Available: http http://interact.uoregon.edu/mediaLit/JCP/articles_mlr/pungente/secondspring.html

Quin, R., McMahon, B. and Quin, R. (1995). *Teaching viewing and visual texts*. Victoria, Australia: Curriculum Corporation.

Ratcliff, D. (1995). An elementary school hallway: Social formations and meanings outside the classroom. Unpublished doctoral dissertation. University of Georgia.

Reid-Walsh, J. Mitchell, C. (2004). Girls' Web Sites: A Visual 'Room of one's Own. In *All about the Girl: Culture, Power and Identity.* A. Harris (Ed.). New York: Routledge.

Riggins, S. (1994). *The Socialness of Things: Essays on the Socio-semiotics of Objects.* Berlin: Mouton de Gruyter.

Rouch, J, and Feld, S. (2003). *Cine-Ethnography*. MINN: University of Minnesota Press.

Ruby, J. (2000). *Picturing culture: explorations of film and anthropology*. Chicago: University of Chicago Press

Rushkoff (writer) and Goodman (Producer). "Media Giants." *The Merchants of Cool.* 1999. PBS Online. 7 Mar. 2003.

Sanders, J. (1997). *Women in technology: Attribution, learned helplessness, self-esteem, and achievement.* Paper presented at the Conference on Women, Girls and Technology, Tarrytown, New York.

Sanders, J., Koch, J, and Urso, J. (1997). *Gender equity right from the start: Instructional activities for teacher educators in mathematics, science and technology.* Mahwah: Lawrence Erlbaum Associates.

Sanders, J. and Tescione, .M. (2002). Gender Equity in Technology Education. In *Defining and Redefining Gender Equity in Education*. Janice Koch and Beverly Irby (eds.), Greenwhich, Conn: Information Age Publishing.

Sefton-Green, J. and Sinker, R. (2000). *Evaluating Creativity: Making and Learning by Young People*. London; Routledge

Sefton-Green, J. (1999). *Creativity, Young People and New Technologies: the Challenge of Digital Arts*, [ed.] London: Routledge

Sefton-Green, J. (1998). *Digital Diversions: Youth Culture in the Age of Multimedia*. London: UCL Press.

Senft, T.M. *Theresa M. Senft's reading notes for Donna Haraway's* "A Cyborg Manifesto" (2008) [On-Line]. Available: http://www.terrisenft.net/students/readings/manifesto.html.

Shroyer, M., Backe, K. and Powell, J. (1995). Developing a science curriculum that addresses the learning preferences of male and female middle level students. In D. Baker, and K. Scantlebury (Eds.), *Science "Coeducation": Viewpoints for Gender, Race and Ethnic Perspectives.* (NARAST Monograph 7): National Association for Research in Science Teaching.

Smith, S. and Cooke, C. (2008) "GDIGM Major Findings Overview based on Gender Stereotypes: An Analysis of Popular Films and TV." Geena Davis Institute. [On-Line]. Available: http://www.thegeenadavisinstitute.org/downloads/GDIGM_Main_Findings.pdf

Sparks, C. (2007) Reality TV: the Big Brother Phenomenon [Electronic version]. *International Socialism: A Quarterly journal of Socialist Theory*. 114

Sparrman, A. (2005). Up the walls! Children's talk about visuality in their own rooms. [On-Line]. Available: cbs.dk/content/download/41837/616348

Statistics Canada. (2007). *Measuring up: Canadian Results of the OECD PISA Study. The Performance of Canada's Youth in Science, Reading and Mathematics. 2006 First Results for Canadians Aged 15*. Ottawa, Statistics Canada.

Statistics Canada. (2008). *University Enrolment*. Statistics Canada Catalogue no. 12-591-XWE. Ottawa. Version updated February 7, 2008. Ottawa. [On-Line]. Available: http http://www.statcan.ca/Daily/English/080207/d080207a.htm

Statistics Canada. (2008). *2006 Census: Earnings, income and shelter costs.* Thursday, May 1, 2008 [On-Line]. Available: http://www.statcan.gc.ca/daily-quotidien/080501/dq080501a-eng.ht

Statistics Canada. (2009). The Daily. Tuesday, September 8, 2009. *Education indicators in Canada: An international perspective.* [On-Line]. Available: http://www.statcan.gc.ca/daily-quotidien/090908/dq090908b-eng.htm

Strauss, A. and Corbin, J. (1997). *Grounded Theory in Practice.* Thousand Oaks, CA: Sage Publications.

Steeves, H. L. (1987) Feminist theories and media studies. *Cultural Studies in Mass Communications,* V4 (2), pp.95-135.

Susskind, J. (2007). *Decoupling Children's Gender-based In-Group Positivity from Out-Group Negativity.* Sex Roles [On-Line]. Available: http://www.springerlink.com/content/5148232285581054/

Thornham, H. (2008). *Feminist Media Studies*; Jun2008, Vol. 8 Issue 2, p127-142, 16p, 1.

Tuchman, G., Kaplan D. A. and Benet, J. (Eds.) (1978). *Hearth and Home: Images of Women in the Mass Media*, New York: Oxford University Press.

Ullian, D. (1984) Why girls are good: A constructivist view." *Sex Roles.* 11(3-4).

United Nations Development Programme – Asia-Pacific Development Information Programme (UNDP-APDIP, 2007). [On-Line]. Available: http://www.apdip.net/

Van Winkle, W. (2009). Portable Video Production Made Easy. *PC Today.* June 2009 Vol.7 Issue 6 40-43, [On-Line]. Available: http://www.pctoday.com/editorial/article.asp?article=articles%2F2009%2Ft0706%2F11t06%2F11t06.asp

van Zoonen, L. Brants, K. and Joke. (1998). *The media in question: popular cultures and public interests.* Thousand Oaks, CA: Sage Publications.

Wasburn, M. and Miller, S. (2006). Still a chilly Climate for women students in technology: A case study. In M. Fox, D. Johnson and S. Rosser. *Women, Gender and Technology*. Ill: University of Illinois Press.

Weber, D. (2007). *A theoretical Framework for Induction: What University Faculties have to offer to Beginning Teachers*. Unpublished doctoral dissertation,. McGill University..

Weber, K. and Cluster, R. (2005). Gender-based Preferences toward Technology Education Content, Activities, and Instructional Methods. *Journal of Technology Education* Vol. 16 No. 2, Spring.

Weber, S. and Dixon, S. (Eds). (2007) Eds. *Growing Up Online: Young people's everyday uses of technology*. New York: Palgrave MacMillan Press.

Wilhelm,G. (2003). *Digital Nation: Towards an inclusive information society*, MASS; MIT Press.

Woolf, V. (1931). *Three Guineas*. Accessed online May 18, 2009. [On-Line]. Available: http http://ebooks.adelaide.edu.au/w/woolf/virginia/w91tg/

Worell, J. (2001). *Encyclopedia of Women and Gender: Sex Similarities and Differences.* San Diego, CA: Academic Press.

World Internet Project. (2009). Canada On-line! 2007 Report [On-Line]. Available:

(http://www.worldInternetproject.net/publishedarchive/CIP07_CANADA_ONLINE-REPORT-FINAL.pdf

Zdep, S. M., and Irvine, S. H. (1970). A reverse Hawthorne effect in educational evaluation. *Journal of School Psychology*, 8, 89-95.

Appendix A: Sample copy of permission form

PARENTAL CONSENT FORM

McGill University

Title of Research: Boys, Girls and media

Researcher: Pierre Doyon, Ph.D. candidate, Education

Contact Information: Tel: (514) 435-6987; email:pdoyon@lbpearson.qc.ca

Supervisor: Claudia Mitchell; Tel: (514) 398-1318

Purpose of the research: In spite of the fact that girls consistently do well in high school ICT and in various forms of media production, the number of women entering computer and information sciences has declined in the past ten years (Statistics Canada and although the number of women entering communications has remained relatively stable, very few women seem to end up working in the field. In the study I am interested in studying the differences in the engagement of boys and girls in media production …What are the differences between boys and girls in media production? Do girls consider media production a career option or do they consider it a "man's job?

What is involved in participating: I will ask your son or daughter a few questions relating to her participation in and /or evaluation of the creation of media texts. The method, time and length of the interview will be at her convenience. These interviews will be audio taped and transcribed. I will ask your child's permission to study various media productions she has created. Your signature below serves to signify that you agree to have your child participate in this study.

Your child's participation is entirely voluntary and she can choose to decline to answer any question or even to withdraw at any point from the project. All information will be reported in such ways that no direct attribution to her will be possible. My pledge to confidentiality also means that no other person or organization will have access to the interview materials and that they will be coded and stored in such as way as to make it impossible to associate them directly with any individual (e.g. they will be organized by number rather than by name)

Consent: I have read the above information and I agree to participate in this study

Signature: _____

Researcher's signature: _____

Name: _____

Date:_____

Appendix B: Sample copy of Assent form

STUDENT ASSENT FORM

McGill University

Title of Research: Boys, Girls and media

Researcher: Pierre Doyon, Ph.D. candidate, Education

Contact Information: Tel: (514) 435-6987; email:pdoyon@lbpearson.qc.ca

Supervisor: Claudia Mitchell; Tel: (514) 398-1318

Purpose of the research: In this work I am interested in studying the engagement of boys and girls in media production: What are the differences between boys and girls in media production? Do you consider media production or computer technology a career?

What is involved in participating: I will ask you a few questions relating to your participation in the creation of media texts. The method, time and length of the interview will be at your convenience. These interviews will be audio taped and transcribed. I will ask your permission to study various media productions she has created.

Your signature below serves to signify that you agree to participate in this study. Your participation is entirely voluntary and you can choose to decline to answer any question or even to withdraw at any point from the project. All information will be reported in such ways that no direct attribution to you will be possible. My pledge to confidentiality also means that no other person or organization will have access to the interview materials and that they will be coded and

stored in such as way as to make it impossible to associate you directly with any individual (your answers will be organized by number rather than by name)

Consent: I have read the above information and I agree to participate in this study

Signature: _____

Researcher's signature: _____

Name: _____

Date:_____

Appendix C: Computer survey

Name:_____

1. Do you own a computer?

2. At what age did you tart using a computer?

3. How do you rate your ability on computers:

a) Great b) Very good c) Good d) Fair e) Not very good

4. Did you ever make a Power Point presentation on a computer for school?

5. Did you ever make a Power Point presentation on a computer for another purpose (at home for fun or for any other reason)?

6. Did you ever make a web site for school?

7. Did you ever make a web site at home for fun or for any other reason)?

8. Have you ever thought of making web sites as a job?

9. Why or why not?_____

10. Have you ever made a video using a computer?

11. Have you ever thought of making videos as a job?

12. Why or why not?_____

13. Do you have any other special skills in computers (besides playing games)?

14. Have you ever thought of working with computers as a job?

15. Why or why not? _____

16. Do you ever play games on computers?

17. How much time do you spend in a day playing games on computer? _____

18. Have you ever thought of making computer games as a job?

19. Why or why not? _____

20. Do you surf the Internet at home or at school?

21. How long do you spend on the Internet at home?

22. How long do you use your computer for:

School (research) _____ hours a week

Games_____ hours a week

Instant messaging_____ hours a week

Social Networking (Facebook, MySpace, etc. _____ hours a week

Entertainment (watching videos, listening to music) _____hours a week

Other (Please explain) _____ hours a week

23. Do you have any limits on how long you can be on the computer? _____

24. If so, how long: _____

25. Have you ever thought of a career using computers?

26. If so, which one?

27. Anything else:_____

_____

_____

_____

_____

_____

Appendix D: Questions for Interview

Interview Guide

What is your age?

Are you planning to go to CEGEP? What college (CEGEP) are you planning to go to?

What are you planning to be taking?

What kind of films do you like to watch?

What shows do you watch on TV?

What is Media production?

Do you have a good sense of media?

What is your favorite media?

When did you first create your own digital production (give examples if student seems unclear?)

How many productions have you created in school?

What kinds?

What decisions did you make concerning your last video production?

What is the message of the video?

What is the theme or mood?

What type of text is it?

What inspired your text?

What program did you use?

What if anything, would you change?

Have you made any productions out of school? What types of productions? (If answer is yes then much more detailed interview of techniques, motivations for choices, etc. will ensue)

Do you have any ideas of where that might take you?

Have you ever considered going into ICT or media?

Why or why not?

If so, what would you like to do in that field?

What city has the most media producers living there? And why?

What is hard about producing media? And why?

Is your taste in media the same as it was when you were a kid? What changed? What is the same?

How do you bring out your media ideas?

Appendix E:

Data from Surveys

1 = Yes	2 = No	3 = Maybe	JR1	JR2	JR3	JR4	JR5	JR6	JR7 Sec II	JR1	JR8	JR9	JR1	JR1	Boy	SR1 Sec	SR2 Sec	SR3 Sec	SR4 Sec	SR5 Sec	S Grils Average V
Do you own a computer?			1	1	1	1	1	1	1	1	1	1	1	1		1	1	Did	Did	1	
How do you rate your ability on computers:			Ver	Goo	Goo	Ver	Ver	Ver	Good	Good	Gre	Ver	Ver	Good		Ver	Fair	X	X	Very good	
Did you ever make a Power Point presentation on a co			1	1	1	1	1	1	2	1	2	1	1	2		1	1	X	X	1	
Did you ever make a Power Point presentation on a co			1	1	2	1	1	2	1	2	1	1	2	2		1	2	X	X	1	
Did you ever make a web site for school?			2	2	2	2	2	2	2	2	2	1	2	1		2	2	X	X	2	
Did you ever make a web site at home for fun or for an			2	2	1	1	2	1	2	2	1	1	2	2		1	2	X	X	2	
Have you ever thought of making web sites as a job?			2	2	2	2	Bec	2	2	2	2	2	1	2		2	2	X	X	2	
Why or why not			Bec	Bec	Tha	Bec	1	It ta	Bec	I am	Dep	Pos	Eas	No beca		I wa	I do	X	X	Because after a while it will get boring	
Have you ever made a video using a computer?			2	1	1	2	1	2	2	2	1	1	1	1		1	2	X	X	1	
Have you ever thought of making videos as a job?			2	3	2	2	1	2	3	2	1	1	2	2		2	2	X	X	2	
Why or why not?			Bec	May	I do	Bec	Bec	I wo	Bec	It se	Aga	Blan	Too	No beca		I do	I do	X	X	Because I would rather be a doctor	
Do you have any other special skills in computers?			2	1	(no	Yes	1	1	1	1	1	1	2	2		1	2	X	X	1	
Have you ever thought of working with computers as a			1	2	(no	1	1	2	2	2	3	1	2	2		2	2	X	X	2	
Why or why not?			Bec	I'm n	I do	Yes	Yes	It w	Bec	It se	May	Gra	Too	No beca		I like	I do	X	X	I only use the computer for projects or fun	
Do you ever play games on computers?			1	2	1	1	1	1	1	1	1	1	1	1		1	2	X	X	1	
How much time do you spend in a day playing games o			1	0	0	0	1	3	0	No,	2	0	1	1	1	2	Dre	X	X	2	2
Have you ever thought of making computer games as a			2	0	(no	2	Kind	2	2	2	2	1	1	3		1	2	X	X	1	
Why or why not?			I am	Bec	I am	No I	It w	I'm n	Bec	I am	N/A	It mi	Loo	Because		I am	I do	X	X	Because I would rather be a doctor	
Do you surf the Internet at home or at school?			1	1	1	1	dep	1	2	1	Hom	Rare	1	1		1	1	X	X	1	
How long do you spend on the Internet at home?			1	1	1	2	2	2	1	3	5	1	2	1		2	I on	X	X	3	
How long do you use your computer for:					1 ho	1 hour			15 r	10	1	1		1		1	4	X	X	2	2
School (research)			3 to	4	1	5	4	1	Dep	0	As	dep	2	2 ho	2	1	4	X	X	2	2
Games			4	0	0	4	1	2	20 r	1	11	1	2	2 ho	5	4	0	X	X	14	6
Instant messaging			0	5	0	1	1	10	10 r	0	0	2	1	10 r	1	6	0	X	X	Dep	3
Social Networking (Facebook, MySpace, etc.			0	0	14	1	0	7	non	0	0	2	3	0	1	2	0	X	X	20	7
Entertainment (watching videos, listening to music)			3	2	8	3	2	3	30 r	0	16	1	1	0	5	5	0	X	X	14	6
Other (Please explain)			8 fo	0	0	0	0	0	Info	0	0	1	0	0	0	0	0	X	X		

Appendix F

Analysis including students Grades

Cycle II (Senior) Girls

Code	Ethnicity	Grades	First Film		Second Film		Third Film		Fourth
Cycle Two Girls		Avg.	Time	Genre	Time	Genre	Time	Genre	Time
SR! "Julie"	!	84	6:18	PSA	5:30	Investigative	N/A	PSA	:42
SR2 "Stella"	Italian	82	0:54	PSA	3:17	Investigative journalism	:41	PSA	:40
SR3 "Linda"	Italian	83	1:23	PSA	2:23	Cinema Varite/Art	1:07	PSA	:38
SR4 "Cleo"	!	75	1:34	PSA	4:56	Investigative journalism	2:19	PSA	N/A
SR5 "Angela"	Italian	77	1:30	PSA	2:58	Scripted Investigative journalism	N/A	PSA	1:10
		80	2.1		3.14				

					Time per slide (Cycle one students only				
JR1 "Laura"	English	86	5		10.7				
JR2 "Jane"	Greek	86	3.36		10.8				
JR12 "Amelia"	French/English	96	7.41		6.3				
JR3 "Marissa"	English	93	4.33	Documentary	7.1	Commercial	Staged Play		Documenta
JR4 "Ressa"	Jewish	79	2.37		8.7				
JR5 "Erika"	English	84	6.43		10.3				
JR6 "JoAnne"	French/English	92	5.43		10.7				
JR7 "Dominique"	French/English	90	5:13		10.5				
JR8 "Erin	English	89	4.31		9.33				
Average for Cycle I girls		88							
Cycle One Boys									
JR9 "Lindsey"	English	73	4.22		6.8				
JR10 "Edgar"	English	72	2.11		8.1				
JR11 "Dave"	!	90	*		*				
Average for boys		80	3.5*		7.3				

! Ethnicity would jeopardize anonymity

Appendix G

Instructions for first film

PROJECT 1
Creating a Public Service Announcement (video) broadcasting the benefits of being at *"West Island High*"

Creating a video and then editing it using a computer can be a fun and challenging activity but can lead to a poor quality, "amateur fourth rate product" if not planned well. Planning is most of the task, so that's how it will be graded.

The first week will be spent watching and analyzing movies for the purpose of "deconstructing" videos and understanding the basics of some of the dozens of genres of movies. Remember, you can do a four year B. A. in Film in University, so don't think this course will do that for you. We are only scratching the surface.

While we watch the films, you will think about what genre of film you want to emulate. You will intersperse your film with YOUR OWN footage AND STILL FROM HOME MOVIES AND/OR HOME PICTURES. NO TAKING PICTURES AND CLIPS OFF THE NET!

You will create a public service announcement (PSA) that points out the benefits of being at *"West Island High*" for other teens with MUSIC, voice over, and titling.

N.B. See rubric for exact criteria and grading assignment.

Appendix H

Cover image by the author's son (Ethan)