Teaching Media Literacy Skills About Commercials:
A Comparative Analysis of Media Literacy Instruction

Christa Love, B. A., B. Ed.
Department of Graduate and Undergraduate Studies in Education

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Faculty of Education, Brock University
St Catharines, Ontario

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Abstract

In this study, methods of media literacy instruction including analytic activities, production activities, and a combination of analytic and production activities were compared to determine their influence on grade 8 students' knowledge, attitudes, and behaviours towards commercials. The findings showed that media literacy instruction does improve media literacy skills. Specifically, activities that included an analytic component or an analytic and production component were significantly better than activities that included a production component. Participants that completed analytic or analytic and production activities were able to discern media-related terms, target audience, selling techniques, social values, and stereotypes in commercials better than participants that completed only production activities. The research findings also showed obstacles when teaching media literacy. When engaged in analytic activities, the difficulties included locating suitable resources, addressing the competition from commercials, encouraging written reflection, recognizing social values, and discussing racial stereotypes. When engaged in production activities, the difficulties were positioning recording stations, managing group work, organizing ideas, filming the footage, computer issues, and scheduling time. Strategies to overcome these obstacles are described.
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CHAPTER ONE: INTRODUCTION TO THE STUDY

This study examined the influence that instruction of media literacy skills had upon students' knowledge, attitudes, and behaviours towards commercials. It has long been established that the media has a strong influence on how people think and act (Percy & Woodside, 1983). With the consumption of all forms of media including television, magazines, radio, video games, and the Internet, children are exposed to a wide range of messages (Girl Scouts Research Institute, 2002; Ontario Ministry of Education, 1989; Schiebe & Rogow, 2004; Statistics Canada, 2004, 2006). Many of these messages come from television advertisements. Commercials are designed not only to inform the public about the goods but also to sell an image of the product (Kline, 1993; Vestergaard & Schroder, 1985). This image often contains stereotypes and value-laden statements (Coltrane, 2000; Coltrane & Adams, 1997; Goffman, 1979) that are subtly interwoven into the commercial using proven persuasion tactics and production techniques (Lloyd-Kolkin & Tyner, 1991). Although often difficult to notice by a casual observer, when viewed repeatedly they have the powerful ability to shape how people think and act (Berger, 1999; Saegert & Young, 1983).

In response, many educators are teaching students critical viewing skills to help them deconstruct the messages, in hopes that this will reduce the influence of advertisers. However, little empirical data indicate the activities that actually increase media literacy skills. According to Tyner (2003), there is a need for research that disseminates compelling evidence that the time engaged in media
education enhances educational opportunities for students. For this reason, the present study examined various forms of instruction including analysis of commercials, production of commercials, and analysis and production of commercials to determine the most effective activities to promote media literacy skills. Using instruments designed to measure the level of media literacy, the changes in students' knowledge, attitudes, and behaviours were assessed. As well, the teaching strategies which were most effective in overcoming difficulties when teaching media literacy activities were also examined. The results of the study have profound implications for educators and researchers. To gain an understanding of the research, the influence of commercials, problems associated with media literacy instruction, purpose of the study, rationale, and limitations of the findings are examined.

Background of the Problem: The Influence of Commercials

To begin a discussion about media literacy instruction, it is first essential to gain an understanding of the qualities of someone who is media literate. "A media literate person is someone who has the ability to access, analyze, critically evaluate, and produce communication in a variety of forms" (Schiebe & Rogow, 2004, p. 1). Based on this definition, a media literate person is able to: recognize the source of the commercial and the purpose of producing the message; identify the product and main message; determine the target audience and describe how the ad aimed for this particular group; discern social values contained within the ad and how this influences the viewer; detect stereotypes including gender and race and how this distorts people's perceptions; recognize production techniques
such as effects, speed, and camera usage to understand how they attract and hold
viewer attention; recognize persuasion tactics and how they manipulate the
viewer; and apply production techniques and persuasion tactics used by media
creators to produce media works that manipulate the thinking of an audience.
Many educators believe that people who possess these skills are less likely to be
influenced by commercials.

To appreciate the need for children to become media literate, it is
important to understand the influence commercials have on viewers. Children see
many advertisements on television. According to a recent survey conducted by
Statistics Canada (2004), Canadian adolescents between the ages 12 and 17 report
spending an average of 12.9 hours per week watching television. In Canada, the
Canadian Radio-Television and Telecommunications Commission (CRTC), the
governing body that regulates television, limits advertising to 12 minutes per hour
(CRTC, 2006). In this time approximately 24 thirty-second commercials can be
aired. Based on the number of hours that adolescents report watching television
(Statistics Canada), this means that in one week an average adolescent watches
more than 300 commercials. Over the course of a year, they may view more than
16,000 commercials. By the time the average person graduates from high school,
they will have been exposed to over 250,000 television commercials. In a
lifetime, the number can easily exceed one million.

An argument could be made that although children are exposed to
commercials, they do not watch them on television. It is true that children’s
attention does decline during commercials (Zuckerman, Ziegler, & Stevenson,
1978), and they do engage in other activities, such as eating, playing, and talking, while the ads are on the screen (Schmitt, Duyck-Woolf, & Anderson, 2003). As well, many homes have recording devices that allow viewers to fast-forward through commercials. However, since large majorities of children have televisions in their bedrooms (Kubey & Serafin, 2001), it is questionable if they engage in similar behaviours when they are viewing programs alone in their rooms. Perhaps in this situation, the child is more likely to attend to the commercials.

It is strange that, although children are often not paying attention to television advertisements, they can recognize brand names and logos (Fisher, Schwartz, Richards, Goldstein, & Rohas, 1991) contained in ads. According to Berger (1999), advertisements provide companies with an opportunity to encode brand information. The goal of advertisers is to provide adequate information repeatedly, so that viewers will transfer the knowledge to memory (Berger; Saegert & Young, 1983). This means that even though children are not fully attending to the television, the content of the commercials is being stored into memory. These ads have longevity, and long into adulthood, they will be remembered. For example, many children who grew up in the 1970s and 1980s can remember the song "I'd like to buy the world a Coke," a commercial in which people from all nations sing together on a hillside (Library of Congress, 2000). As well, many adults today can recall the gum advertisement, "Juicy Fruit is going to move you," a catchy jingle that is mocked today in the modern-day version of the commercial. Although viewers may not be entirely focused upon watching the television screen, these commercials are being remembered, some for a lifetime.
Consider the thousands of commercials that are etched in memory. Each one is constructed carefully. Everything in the advertisement from the setting, actors, language, action sequences, sound, special effects, and camera angles is thoughtfully selected (Lloyd-Kolkin & Tyner, 1991). Nothing is accidental. This is because the persuasive tactics and production techniques used within the commercial are based on research. Companies study consumers to learn the age, race, education, sex, social status, workplace position, values, behaviours, and purchasing habits of their target audience. As well, they conduct tests before releasing a commercial to the public to ensure that it is effective (Dow, 1981; Kline, 1993). The reason that people can remember logos, brand names, slogans, and jingles is because advertisers have spent thousands of dollars to ensure commercials are memorable.

It is important to realize that the messages in television advertisements are not limited to conveying product information. Rather, a well-constructed commercial creates an image for the product (Kline, 1993; Vestergaard & Schroder, 1985). This image often contains stereotypes and value-laden statements that tell people how to think or act (Coltrane, 2000; Coltrane & Adams, 1997; Goffman, 1979; Kline). Although subtle, over time these hidden messages have a strong influence on children’s view of the world.

For example, advertisements can shape children’s perception of gender roles. The stereotypical image of female characters remains entrenched in advertisements, despite the changes in women’s roles in society today. Consider the recent Coke commercial. The ad is promoting the product Coke with Lime
and uses a catchy jingle that has the actors sing "put the Lime in the Coke you nut" to promote the pop. What a casual observer may not notice is the women in the commercial are flight attendants and cheerleaders, while the men are high level executives and scientists. In a recent study, Coltrane and Adams (1997) demonstrated that the Coke commercial is not an exception to the type of ads on television. Instead, after analyzing the content of television ads, the researchers found that women characters are placed in traditional roles in commercials and as a result are more likely to be shown in families, less likely to be employed in professional occupations, less likely to exercise authority, and more likely to be pictured as sex objects. What is concerning about this stereotypical imagery is that children learn from the ads what can be regarded as acceptable behaviour.

Moreover, children also learn prejudice from commercials. Despite the fact that Canada is a multicultural society, racial inequality is prevalent in many ads shown on television. Consider the latest Boston Pizza commercial. There are numerous patrons dining at the restaurant, but all the characters are White, with the exception of one Black character that is standing near the edge of the screen. Where are the Asian or Hispanic characters? They are invisible. According to Coltrane (2000), the exclusion of non-White actors is extremely common in television ads. However, when non-White actors are shown in commercials, they are rarely portrayed as sex objects, dominant, or in family situations. This is a problem, because racial stereotypes teach children racial prejudice.

Aside from the perpetuation of racial and gender stereotypes, commercials contain messages that shape children's value system. Television advertisements
tell people what products they need to own to be beautiful, happy, successful, and popular (Kline, 1993; Oliver, 1981). For example, the commercial for the toy Bratz Big Babies shows a group of girls playing with their dolls. The actors are having a great time, and the hidden message to the viewer is that if you want to have many friends and fun you need to own this toy. At an early age, children learn to want things that they see advertised on television. According to Oliver, this is because advertisers suggest the state of mind the viewer will achieve if they purchase the material item. Since children do not develop a healthy skepticism towards advertisements until adolescence (Linn, Benedictis, & Delucchi, 1982), they are left vulnerable to the messages contained within commercials.

Commercials are highly effective in influencing children. Research shows that children tend to be more materialistic when they watch many television advertisements (Buijzen & Valkenburg, 2003). The average children today place value on brand name items and believe that material goods reflect their personality (Chaplan & John, 2005). This attitude is a result of a shift in the marketplace that now acknowledges children and teenagers as an important force. For example, the youth clothing apparel market is a $54 billion industry in the United States (International Trade Canada, 2006), and advertising plays a big part in cultivating the brand awareness.

Aside from commercials shaping values and beliefs, they also influence how people behave. Research suggests there is a link between advertisements and obesity in children. In a recent study, children who watched food advertisements were found more likely to consume that type of food after watching television
(Halford, Gillespie, Brown, Pontin, & Dovey, 2004). Since many advertisements sell children sugar cereals, pop, and treats, they are having a negative impact on healthy eating habits.

The time children spend viewing television places them in a vulnerable situation. This is because they are exposed to thousands of commercials containing messages about how people should think or act and the values that they should possess (Goffman, 1979; Halford et al., 2004; Kline, 1993). Moreover, the stereotypical images of gender and race contained within the ads have the ability to perpetuate prejudice (Coltrane, 2000; Coltrane & Adams, 1997). With some television ads etching themselves into memory for a lifetime (Berger, 1999; Saegert & Young, 1983), there is a need to promote critical viewing to limit the influence commercials have on viewers.

The Issues Associated with Media Literacy Instruction Research

In response to the influence of commercials on children’s knowledge, attitudes, and behaviours, educators are teaching media literacy skills in hopes that students will become critical viewers; but is it working? There are conflicting viewpoints about activities that are most effective in cultivating change in how students perceive media. Some educators believe that teaching media literacy skills is making a substantial difference in students’ behaviour and beliefs towards commercials, but the research does not consistently support these claims.

Personal accounts of classroom learning indicate that educators believe media-related activities do help protect students against the negative influence of media. Statements made by teachers and researchers describe students as
becoming intelligent media consumers because they participate in media-related activities. They state that, as a result of critiquing and producing media, their students view programs selectively; understand how media affects society, behaviour, and health; recognize sources of bias; identify credible sources of information; understand the political, social, and commercial forces shaping media messages; distinguish between fact and fiction; and avoid manipulation by the media (Adams & Hamm, 2000; Hobbs, 1998; Learmont, 2003). There is a strong opinion shared by many people in the field of education that teaching students about the media is making a positive difference.

However, heartwarming stories about classroom activities are not enough. According to Tyner (2003), there is a need for research that disseminates compelling evidence that the time engaged in media education enhances educational opportunities for students. Unfortunately, very little empirical data have been collected supporting the claim that media activities produce media-literate students, and the quantitative research that does exist is inconclusive. This is largely because there is a difference in the types of activities and duration of the training used to teach an awareness of media messages. For example, Yates (2001) studied the attitudes of children in grades 4 and 5 and discovered that media literacy training had no influence on their attitude towards the product, advertisement, or commercials in general. However, participants spent only one hour taking part in analytic activities, which may have been an inadequate amount of time to shape children's belief system.
In contrast, Kubey and Serafin (2001) found that students' attitudes and knowledge about advertisements increased after taking part in media literacy instruction over the course of 6 months, for one period a week. Participants in this study were able to describe the target audience, selling techniques, and social values after receiving media literacy instruction. However, even with this training, student's agreement towards the statement "People who create media messages do a lot of thinking about how to attract audiences with their messages" did not strengthen. Students seemed to lack an understanding of the process behind making a commercial. This may be because the teachers taking part in the study had the option of selecting the types of activities used in the classroom, and many reported a lack of equipment, which could have helped to teach those media skills, to be an obstacle to engaging in production activities.

Verkaik and Gathercoal (2001) found that high school participants who had 15 lessons in media literacy instruction were able to better comprehend television advertisements. In this study, the students analyzed the message in commercials as well as the production techniques used in their construction. Production techniques that were examined included audio and visual design, sequencing, and the framing and composition for each shot. This combination of analytic and production activities could explain the ability for students to act as critical viewers. However, the sample size was small, with 6 students in the treatment group, which makes it difficult to make strong conclusions from the research findings.
It is believed that production activities are the key to increasing media literacy skills. Many educators argue that video production of commercials helps children to understand that media texts are constructed carefully (Butler, 2003; Race, 2003; Worsnop, 1994). For the most part, this opinion is based on personal experience. Little quantitative data exist to support the claim that creating commercials using video equipment increases media literacy skills (Tyner, 1994).

Does media literacy instruction make a difference in students’ knowledge, attitudes, and behaviours towards commercials? What is the most effective type of media literacy instruction to cultivate critical viewing? There are no clear answers found in the research. The inability to make strong conclusions may be due to the wide range of media literacy activities used within the studies conducted and inconsistency in the instruments used to measure media literacy.

There is no standard tool to determine people’s level of media literacy. In some cases improvement of skills is based on observation—it looks like the students know more media (Butler, 2003). In other research, participants complete surveys and multiple-choice questionnaires that are used to assess their knowledge of media such as terms, target audience, purpose, and stereotypes (Kubey & Serafin, 2001). Another technique is to have children view sample media and then answer questions using paper and pencil measures with open-ended and checklist items to determine students’ ability to identify construction techniques, values, point of view, and omitted information (Hobbs & Frost, 2003; Kubey & Serafin). Yet another method used to measure media literacy is to evaluate the quality of a completed media work (Worsnop, 1996). With such a
wide range of instruments, it is often difficult to compare the research about the effectiveness of media literacy instruction. This could explain the inconsistency in current research findings.

If teachers are going to dedicate instructional time to media literacy training, then there is a need to identify the most effective methods of instruction. Teachers are currently using analytic and production activities to promote critical viewing of media. Although there is a strong belief by many educators and researchers that media literacy instruction reduces the influence of television ads on viewers, more empirical data are needed to support these claims.

The Purpose of the Study

The purpose of this study was to compare the influence that forms of media literacy instruction have on students' knowledge, attitudes, and behaviours towards commercials. To understand the most effective methods of teaching media literacy skills, students participated in a variety of activities in which they analyzed, produced, or analyzed and produced television advertisements. Afterwards, their level of media literacy was measured to determine the changes to knowledge, attitudes, and behaviours.

Specifically the research question, "What form of media literacy instruction is most effective in changing students' knowledge, attitudes, and behaviours towards commercials?" was investigated. This is an important area of study because if teachers are going to dedicate classroom time to media literacy training, then there is a need to identify the most effective method of instruction. In the present study, the following questions were investigated:
• Does media literacy instruction result in a change in students' knowledge, attitudes, and behaviours towards commercials?

• What type of media literacy instruction is the most effective in changing students' knowledge, attitudes, and behaviours towards commercials: activities that have students analyze commercials; activities that have students produce commercials; or activities that have students analyze and produce commercials?

• What obstacles do teachers need to overcome when engaging in media literacy activities?

• What are teaching strategies that educators can use when engaging in media literacy activities to overcome obstacles?

The Rationale for the Study

This study makes a significant contribution to the area of media literacy. This field of research is relatively new. In fact, it was only 20 years ago that the term media literacy was defined at the National Leadership Conference on Media Literacy. The conference, held in Maryland, was the beginning of a movement that mobilized citizens into action (Aufderheide, 1992). Today people in all facets of society are concerned about the impact of the media on children and adolescents and believe there is a need to teach critical viewing. This study addresses their concerns.

Anyone who watches television should be worried about the influence the media has upon attitudes and behaviours. In conversations with both adults and children, it becomes evident that people think that commercials influence only
other viewers, but the persuasive tactics do not sway them personally. This
naiveté gives advertisers the window of opportunity to create commercials that
subtly convince viewers to purchase their goods. The research shows children are
influenced by advertisements (Buijzen & Valkenburg, 2003; Halford et al., 2004;
Pike & Jennings, 2005; Robinson, Borzekowski, Matheson, & Kraemer, 2007).
For this reason, it is imperative that children acquire critical viewing skills.

Educators understand the need to teach students media literacy skills. In a
recent survey, the majority of teachers stated that critical viewing of media is
important (Yates, 2002). However, it is often difficult to select activities that
easily fit into curriculum. Common obstacles include a lack of resources (Hobbs,
1998; Tyner, 2003; Yates), professional development (Hobbs; Kubey, 1998;
Tyner; Yates), time (Hobbs; Tyner; Yates), difficulty assessing nonwritten forms
of student work (Hart, 2001; Tyner), lack of confidence (Hart), and unreliable
equipment (Hart; Hobbs). Moreover, despite teachers finding this topic important,
they are often reluctant to include it in curriculum because they feel pressure to
teach traditional subjects instead of media (Kubey; Yates). This research hopes to
resolve some of those issues by providing an understanding of the types of
activities that are most effective and solutions for overcoming common
difficulties to ensure that educators do not waste their valuable instructional time.

Moreover, this study was intended to help confirm many of teachers’
personal beliefs about the importance of media literacy instruction. Educators
who teach children how to analyze and produce media works claim these
activities make a substantial difference. Some of the benefits include selective
viewing, recognizing stereotypes, highlighting hidden messages, and, most important, avoiding manipulation by the media (Adams & Hamm, 2000; Hobbs, 1998; Learmont, 2003). Research in this area does attempt to substantiate teachers' personal experiences. However, many of the studies to date have design flaws such as a lack of a control group (Kubey & Serafin, 2001), an inconsistency amongst participants regarding the type of activities they completed as part of media literacy instruction (Kubey & Serafin), and small sample size (Verkaik & Gathercoal, 2001). This study was designed to overcome some of these issues and to quantify what many teachers already believe to be true, which is that media literacy instruction makes students more media literate.

The research findings from this study are a significant contribution to educators and researchers. They offer a comparative analysis that helps to highlight the types of media literacy activities that lead to critical viewing. This information may be of use to teachers when they are designing tasks for their students with the intention of cultivating media literacy skills.

Scope and Limitations of the Study

This study had some limitations that restrict the ability to generalize the findings to all children. The participants in this research were selected from private Christian schools. These children often have a high socioeconomic status as many come from families that can afford to pay for their education. Moreover, all of the participants belong to families where Christian values are emphasized. In some cases, the children may be limited in the exposure they have to media, as many parents in this community restrict and monitor television viewing.
Another limitation to the study is that it measures only the change in knowledge, attitudes, and behaviours towards commercials. This confines the findings to only this form of media. Although there are numerous types of advertising such as billboards, magazine ads, radio announcements, electronic mailouts, and Internet pop-up ads, this study does not measure critical viewing of these forms. Moreover, it does not investigate other kinds of mass media such as newspapers, magazine, radio, the Internet, video games, or television programs.

An Overview of the Document

In this study, the forms of media literacy instruction that are most effective in changing students' knowledge, attitudes, and behaviours towards commercials were investigated. The remaining chapters within this document provide a foundation for understanding the area of study, the research itself, and the implications of the findings. Specifically, the remaining chapters are Literature Review, Methodology, Presentation of Results, and Summary of Findings.

In Chapter Two, titled Literature Review, a framework for understanding the issues surrounding media literacy is outlined. To begin, media literacy is defined. Afterwards, the need for media literacy instruction is established, with examples provided of the ways commercials influence people. To understand why humans are persuaded by the content of advertisements, the place of commercials within society is established, and the techniques used in their production are outlined. Following this discussion is an overview of education organizations and their response in developing media literacy learning objectives. Specifically, the Ontario Ministry of Education’s curriculum documents and the implementation of
the learning outcomes are examined. The review of the literature then shifts to classrooms, with the forms of instruction and their effectiveness in cultivating media literacy skills investigated. At the end of the chapter, a summary of the research is provided.

In Chapter Three, titled Methodology, a description of the study is outlined. In detail, the methodology and design, pilot study, participant selection, materials and instrumentation, procedures, data collection, and data analysis are outlined with the intent to offer sufficient detail in the event that another researcher would like to replicate the study. In addition, a critical examination of the methodology and design shows the assumptions, limitations, credibility issues, and ethical considerations that were part of the study. At the end of the chapter, the main purpose of the investigation is reiterated.

In Chapter Four, titled Presentation of Results, the research findings are presented. The results summarize students' access to media and advertising, which includes details such as number of media devices in the home, exposure to advertisements based on leisure-time activities, multitasking behaviour, recording devices, parental restrictions, and television watching behaviour. These results help to illuminate the high consumption that youth have to commercial messages. Afterwards, the influence of media literacy instruction is measured, with a comparison amongst the groups to determine the change in knowledge, attitudes, and behaviours towards commercials. A brief summary follows, which describes the obstacles encountered by teachers when engaged in media literacy instruction.
In Chapter Five, titled Summary of Findings, the importance of the research findings is highlighted. This examination provides an overview of the study including the purpose, methodology, and findings. Afterwards, the meaning of the data is discussed. This discussion includes an examination of students' media consumption habits. It also includes a summary of the state of students' knowledge, attitudes, and behaviour towards commercials and reports on how this changes after media literacy instruction. Interwoven throughout this discussion are hints for teachers when teaching media literacy skills to students. What follows is an examination of the obstacles faced by teachers when engaged in analytic and production activities, with strategies to overcome the difficulties. This chapter concludes with a discussion about the implications for educators and ideas for future research.
CHAPTER TWO: LITERATURE REVIEW

Advertising is everywhere in our children’s lives. They awaken to the sound of an announcement coming from the clock radio and then walk downstairs to eat breakfast in front of a television displaying well-targeted commercials. The landscape to and from school is littered with numerous billboard advertisements. The ads become digitized when they turn on the computer to peruse websites and read their email. Every daily event has commercials seamlessly intertwined.

Commercials contain stereotypes and value-laden statements (Coltrane, 2000; Coltrane & Adams, 1997; Goffman, 1979; Kline, 1993) that are subtly interwoven into the commercials using proven persuasion tactics and production techniques (Lloyd-Kolkin & Tyner, 1991). Since children are such large consumers of media, especially from the television, radio, (Ontario Ministry of Education, 1989; Statistics Canada, 2004), and the Internet (Girl Scouts Research Institute, 2002; Statistics Canada, 2006), there is concern about the impact that advertisements are having on development (OECD, 1982). Throughout the years, many research studies and articles have been written about the influence of the media (Adams & Hamm, 2000; Butler, 2003; Kubey, 2002; Learmont, 2003; Lewis & Jhally, 1998; Tyner, 1994). To provide a framework for understanding the study, the literature about the topic of media literacy will be examined. This examination will answer the following questions: What is media literacy; what influence do commercials have on viewers; why are commercials so persuasive; and what are educators doing to teach media literacy skills?
About Media Literacy

To begin a discussion about the need for educators to address media literacy skills in their curriculum, it is essential to understand the qualities of a media literate person. "A media literate person is someone who possesses the ability to access, analyze, critically evaluate, and produce communication in a variety of forms" (Schiebe & Rogow, 2004, p. 1). In terms of commercials, a media literate person is able to recognize the source of the commercial and the purpose of producing the message; identify the product and main message; determine the target audience and describe how the ad aimed for this particular group; discern the social values contained within the ad and how this influences the viewer; detect stereotypes in commercials including gender and race and consider how this distorts people's perceptions; recognize production techniques such as effects, speed, and camera usage to understand how they attract and hold attention; recognize persuasion tactics and how they manipulate the viewer; and apply production and persuasion techniques used by media creators to manipulate the thinking of an audience (Schiebe & Rogow).

The Influence of Commercials on Viewers

From the minute children enter the world they are surrounded by media. It is reasonable to assume that intuitively children know about the manipulation techniques used in commercials and are not influenced by these messages. After all, their vast consumption of media in all its forms including television, radio, books, magazines, newspapers, billboards, movies, recorded music, video games,
and computer applications (Schiebe & Rogow, 2004) should make them media experts.

This viewpoint does seem sensible, especially when the following facts are considered. According to the Ontario Ministry of Education (1989), the numbers of hours per week Canadian children spend as media consumers are exceeded only by the time spent sleeping. By the time many students finish high school, they will have spent an average of 11,000 hours watching television and 10,500 hours listening to popular music. Moreover, they will have been seen hundreds of films (Ontario Ministry of Education), and browsed numerous websites on the Internet (Girl Scouts Research Institute, 2002). By the time students graduate from high school they will have spent thousands of hours viewing advertisements. With this extensive amount of time spent consuming media, it does seem reasonable to assume that mere exposure may automatically make children immune to the persuasive power of commercials.

Unfortunately, viewing advertisements does not make people media literate. According to Levin, Petros, and Petrella (1982) the ability to resist commercial pressure requires a sophisticated level of understanding that does not develop merely from exposure to media. In their research they found that although children as young as 3 years of age had the ability to distinguish between advertisements and television programs, they were unable to understand the selling motives of advertisers. Critical thought of commercials does not seem to develop until adolescence. At this age, children tend to be skeptical of advertisements but are still unable to evaluate their misleading claims (Linn et al.,
1982). In fact, many high school students are unable to understand the motives of advertisers when the commercial is made to look like a public service announcement (Fox, 1995). This leaves viewers susceptible to the persuasive messages, stereotypes, and value-laden statements contained in commercials.

This attack on impressionable minds has led many European countries to ban marketing to children. In Canada, Quebec has had legislation since 1978, prohibiting companies from advertising directly to children under 13. However, no other province has such legislation. In 1989, the Supreme Court of Canada upheld Quebec's ban in a landmark Charter of Rights ruling on the issue of freedom of expression. The court said "advertising directed at young children is per se manipulative. Such advertising aims to promote products by convincing those who will always believe" (CanLII, 1989). It is important to note that regulations are limited in their ability to protect children. Consider that although this law helps children under 13, it does not protect adolescents, who can still be quite impressionable.

Moreover, commercials are no longer limited to television. Many are posted on websites. For example, on the My Little Pony website, children can click on the "Video" link to view a commercial for the toy (Hasbro, 2007), and teens can watch their favourite music video on the MuchMusic website, but not before a commercial is played (MuchMusic, 2007). The repackaging of commercials onto websites means that regulations have little power over online forms of advertising. According to Jorgensen (2005), companies post content to
their websites to maximize visitors’ online exposure to the brand. Thus, regulations do little to protect people from the reach of advertisers.

Commercials do not just inform viewers about goods; they communicate information about gender roles, race, social status, and lifestyle (Coltrane, 2000; Coltrane & Adams, 1997; Goffman, 1979; Kline, 1993). For example, think about the commercials that are played on television. Women are cleaning, caring for children, looking beautiful, and working in low-level positions. This has been the case for decades. Coltrane and Adams studied commercials from the 1990s and found that women characters were more likely to be shown in families, less likely to be employed in professional occupations, less likely to exercise authority, and more likely to be pictured as sex objects. The traditional role of women is portrayed in commercials, and this sends a message to viewers about what is considered appropriate behaviour for females.

As well, women are underrepresented in commercials. In the 1980s, only 33% of the characters were women however in recent years this has jumped to 45%. Although this increase demonstrates a sign of equality, it is disappointing to realize that although there are more female characters, the expert role tends to be played by men. More males are the voice for the narration in commercials and they frequently have the role of announcer or researcher (Coltrane & Adams, 1997). In terms of commercials targeted towards children, there is a strong male presence, with even the animated characters being male. Children watch Tony the Tiger playing sports; the Honey Nut Bee race to get a bowl of cereal; and Snap, Crackle, and Pop dance around the Rice Krispies box. There are few female
characters in children’s ads, and their presence is overshadowed by dominant, knowledgeable males.

Even when only a body part is shown, the image is used to place social weight on the genders. According to Goffman (1979), in advertisements, women's fingers and hands are used to cradle and caress, whereas men's hands are used for utilitarian purposes such as to grasp, manipulate, or hold. As well, women are commonly placed in "bashful" poses, with the head turned slightly downwards or the knee bent, whereas men are placed in "assertive" poses. These images send a message about gender roles to viewers about the cultural distinctions between men and women.

Other information that commercials convey that has nothing to do with the product itself is the status of race. Coltrane (2000) studied commercials aired during the 1990's and found that White characters dominated commercials. Although Black people were in ads, Asian and Hispanic characters were rarely present. In addition, the role of the characters also tended to differ by race. Non-White actors were rarely portrayed as sex objects, dominant, working, or in family situations. These images convey a message about the status of visible minorities and can lead to the perpetuation of prejudice.

Aside from the stereotypical images of gender and race, commercials also contain hidden messages that make value-laden statements. Television advertisements tell people what products they need to own to be intelligent, successful, beautiful, and popular. Kline (1993) argues that manufacturers produce commercials that will make viewers think that the person on the screen is
"just like them." They prey on the fact that people want to be like their peers. By using words and images, they tell people what shoes to wear, toys to own, and food to eat. It is implied in the ad that by purchasing the advertised goods, people will have lots of friends, fun, or whatever other desirable value has been portrayed (Oliver, 1981).

Although commercials contain hidden messages about social inequality and personal happiness, it could be argued that the viewer does not notice this imagery and remains unaffected by the ads. In fact, most people do not believe they are influenced by television advertisements. Instead, in personal conversations with students, colleagues, family members, and friends, they all state that although the ads are likely to persuade others, they are not personally swayed by their content.

However, advertisements have the powerful ability to influence viewers' attitudes and behaviours (Percy & Woodside, 1983). According to the Organisation for Economic Co-operation and Development (OECD, 1982), children at an early age are targeted by companies that breed in them a desire for items and knowledge of brand names. In a recent study conducted by Robinson et al. (2007), preschool children took part in a taste test. Identical food was placed in McDonald’s packaging and nonbranded packaging. Food that was branded with the McDonald’s logo was perceived to taste better. This was true for carrots, a food that is not marketed or sold from McDonald’s restaurants. These findings show that food marketing has a powerful influence on people.
As well, advertisements cultivate materialistic values, and a correlation has been established between the exposure to commercials and materialism in children, preteens, and adolescents (Buijzen & Valkenburg, 2003). This is especially true around Christmas time when commercials are aired on television. Research shows the more television children watch in December, the more likely they are to request brand name toys and list a higher quantity of items in their letters to Santa (Buijzen & Valkenburg, 2000; Pine & Nash, 2002). As children age, their self-concept becomes attached to brands. A recent study found that adolescents purchase brand name items because they believe the product reflects their personality (Chaplan & John, 2005). These studies highlight the susceptibility of people to media messages.

Not only do ads encourage children to become materialistic, but they also shape their behaviour. In 2002, Unilever released Axe, a fragrance for men, to the North American marketplace. The advertising campaign showed men dousing themselves in spray, with women flocking to their side due to the "Axe effect." The suggestion that Axe helped attract females was enough to make middle school aged boys purchase the body spray. As one 13-year-old stated, "Sometimes when you wear it the ladies will turn their heads at you." The belief that the advertisement was true has caused locker rooms and hallways to reek of the smell of the popular body spray as boys engage in personal grooming in an attempt to make girls notice them at school (Aratani, 2006). The usage has become so extreme that in some Canadian schools grade 8 teachers have banned the use of the product. This situation shows the power of advertising.
The Canadian military knows that advertising works. Their latest ad campaign to recruit troops is aimed at a generation that has grown up with video games. The spots aired on the MuchMusic TV network are designed for youth. A pounding drumbeat, stark scenes of troops in action, and the imprinted words "Fight fear. Fight distress. Fight chaos. Fight with the Canadian forces" are all designed to make younger Canadians enlist. It cost the Department of National Defence approximately $3 million to produce the advertisement, and recruiters are confident it will cause youth to enlist (Lawson, 2006).

Commercials have a direct influence on how people act. When children watch television, they are exposed to countless advertisements selling fast food, sugar cereals, and snacks. Recent findings show the more time children spend watching television, the more likely they are able to recognize food advertisements. Moreover, food intake greatly increases after viewing these types of commercials, with children selecting unhealthy items that are high in sugar and fat (Halford et al., 2004). These findings show the influence advertisements have on children's actions and decisions.

As well, commercials also have the ability to shape children's belief systems. Many advertisers promote toys as gender specific. Pike and Jennings (2005) found that when children view commercials where only boys or girls are playing with a toy, they are more likely to sort the item in the ad into gender-specific categories, marking the object as a "girl toy" or a "boy toy." What is disconcerting about this research is that children as young as 7 or 8 years of age are having their perception of gender shaped by advertisers.
It is reasonable to believe that the influence of commercials on behaviours and attitudes declines with age and that once children reach adulthood, they are no longer susceptible to the persuasive tactics used by advertisers. However, there is evidence that this is not the case (Brader, 2005; Kravitz et al., 2005). In recent years, there has been an increase in advertisements for prescription drugs. Prescription drug advertising in the United States is a $3.2 billion industry. One of the most widely advertised drugs is the antidepressant Paxil. In a current study, researchers found that advertising persuades patients to ask their doctors for Paxil and influences the medication doctors prescribe to their patients (Kravitz et al.). Very similar to young children who ask for brand name items in their letters to Santa (Buijzen & Valkenburg, 2000; Pine & Nash, 2002), adults are also being conditioned to recognize and want goods they see on television.

Advertisers have enormous power. One of the most important decisions an adult will make is the person he or she elects to run the nation. In the 2004 presidential election in the United States, candidates, parties, and advocacy groups spent at least $1.2 dollars on television advertising (Bachman, 2004; Bush Won, 2004). This money was well spent, because political ad campaigns have the ability to shift the outcome of an election. Research suggests that candidates can influence voting behaviour by creating ads that have emotional appeal. Brader (2005) conducted a study to determine how political ads motivate and persuade votes. He found that music and images, when paired with a strong message, changed the way citizens get involved in an election and make voting decisions. Messages that contained a positive message and an enthusiastic appeal were
found to increase people's interest in the campaign, intention to vote, and loyalty towards a candidate, whereas, messages that contained a negative message and a fear appeal were found to spur the desire to seek related information about the issues and persuade the voter to change their preexisting preference towards a candidate. Research shows that commercials shape how children understand gender-appropriate behaviour (Pike & Jennings, 2005); this influence continues into adulthood, when advertisements will mold political views (Brader).

Television advertisements can play a part in determining how people think and act (Percy & Woodside, 1983). This is because ads contain not only information about the goods, but stereotypical images and biased, value-laden statements (Coltrane, 2000; Coltrane & Adams, 1997; Goffman, 1979; Kline, 1993). Research shows children and adults alike are unable to withstand the seductive nature of commercials (Brader, 2005; Buijzen & Valkenburg, 2000, 2003; Halford et al., 2004; Kline; Kravitz et al., 2005, Pine & Nash, 2002). For this reason, gender bias, racial prejudice, values, materialism, consumer habits, dietary choices, and other decisions are shaped by advertisers.

Commercials are Persuasive

To understand why commercials are so persuasive, it is essential to establish the place these advertisements have in society. Commercials have become more than just 30-second clips that appear between segments of a television program. In some cases, they are considered modern-day forms of art. There are awards granted for commercials, with the most prestigious being the CLIO Awards (Clio, 2007). Commercials win in categories based on product,
such as best soft drink commercial, or by type, such as best animated commercial. The awards ceremonies are often televised, which creates an ironic situation whereby the viewer watches commercials as the program.

The strange fact is that in many cases commercials have become a form of entertainment. Consider the Super Bowl, which is a televised sporting event for football in the United States. The ads that air during this game are given prestige. Many people who are not sports fans watch the game just to see the commercials. Numerous websites are dedicated to storing these advertisements to allow people to view them repeatedly (IFILM.com, 2007). In fact, the Internet is full of websites that catalogue commercials from vintage ads in the 1970s and 1980s (X-Entertainment.com, 2007) to favourites of today (Clipland.com, 2007). In addition, the ads people like are sent to friends, family members, and colleagues as email attachments. Today, commercials are more than just "filler" between shows; they are something people enjoy watching.

In a report prepared for the Canadian Radio-Television and Telecommunications Commission (CRTC), the attitude of Canadians towards television advertising was studied. Findings showed that one third of Canadians reported that they often watched commercials. In addition, many respondents stated that they made a point of seeing a commercial that they liked. As well, more than 58% reported that the best type of commercials were those which were entertaining (Avrim Lazar and Associates Ltd, 1978). It would appear that for many Canadian viewers, commercials are part of the entertainment when watching television.
Often the characters in commercials become so familiar to viewers that they are missed when a company decides to move in a different direction with their ad campaigns. For 8 years, Canadian Tire used the famous couple, Ted and Gloria, to show off innovative products purchased from Canadian Tire. When the company made a decision to no longer use the demo-mercials, it became front page news, with the headline, "Canadian Tire retires couple," announcing the retirement (Canadian Press, 2006). Canadians were shocked to have the couple, who had ascended into the realm of pop culture, leave the world of television after almost a decade.

According to Kline (1993), commercials have such a strong appeal because they are well crafted. Marketing goods is a billion dollar industry, and in the United States over $16 billion are spent on television advertising alone (Bogart, 1990). Companies know that the way to generate revenue is to promote their products and services to the public. One successful marketing strategy is to design commercials that are strategically placed onto television ad spots (Bogart). One of the key reasons this method of marketing is so effective is because advertisers and the companies they represent have spent years conducting extensive research to discover the demographics of the consumers they want to purchase their goods. Businesses have studied the age, race, education, sex, social status, workplace position, values, behaviours, and purchasing habits of their target audience. Moreover, advertisers understand human psychology and know the words, sounds, and images that will evoke a desired response from the viewer. Every commercial, before it airs on television, is shown to a test market group to
get feedback about how to make the ad more appealing (Dow, 1981). By the time the advertisement reaches the television, thousands of dollars will have been spent on a 30-second commercial, which will generate millions of dollars for the company.

It is important to acknowledge that nothing in a commercial is accidental. Every aspect is constructed carefully. Advertisers thoughtfully select the words, actors, imagery, music, effects, camera angles, actions, and lighting to produce an ad that will gain and hold viewer attention. The tactics commonly used by advertisers include showing people doing something that makes the viewer want to be like the characters; posing a question that the product answers; showing a famous person using the product; having an expert list the product benefits, often with statistics; creating a fantasy world with animated characters and special effects; showing an activity that is made to look exciting because of a product; using humor; including a catchy jingle or slogan; using imagery that catches your attention; showing the competitor's product as inferior; using words that make the product sound irresistible; and including characters that look like average people such as friends or neighbours (Lloyd-Kolkin & Tyner, 1991).

Although the tactics may seem obvious, they can be difficult to notice. This is because the action in the commercials is fast paced. A typical commercial is between 10 and 30 seconds in duration. To get their message across in a short period, advertisers construct commercials whose action occurs very fast. They do this by making the objects move quickly, filming objects moving at a faster speed than normal, switching the angle of the shot continually, and swiftly panning
areas (Gottschalk, 1999). This makes it difficult for people to focus on the action, because it is happening too quickly.

The tactic of speed is very effective because it prevents people from being discerning viewers. Kubey and Serafin (2001) found that even when children received media literacy training they were still unable after multiple viewings of a 15-second Tony the Tiger commercial to notice small details. They could not accurately determine if certain actions occurred, objects were shown, or music was heard. The ability to notice elements with any certainty is difficult when the content of the ad is flashing across the screen. This could explain why people do not believe they are influenced by commercials. If viewers cannot notice obvious details in plain view, how can they notice the subtle stereotypes, hidden messages, and manipulation tactics interwoven into television advertisements? They cannot, which makes speed an effective technique for selling goods.

Not only are commercials so persuasive because they are well crafted but also because they are viewed repeatedly. According to Saegert and Young (1983), people are able to remember brand names when they view commercials frequently. Berger (1999) states that advertisements provide companies with an opportunity to encode brand information. The goal of advertisers is to provide adequate information repeatedly, so that viewers will transfer the knowledge to memory. It is not seeing the commercial once that makes it persuasive but rather viewing it repeatedly that makes the advertisement so powerful.

Repeating viewings do not occur just on the television but on any device with a screen. In the digital world, television spots are repackaged to appear on
any computer screen via the Internet. Advertisements that are on television are replayed on websites but are often named trailers, videos, or movies, so that the person does not know they are watching a commercial. This tactic is used on the *My Little Pony* website where children can click on the "Video" link to view a commercial for the toy (Hasbro, 2007). The repackaging of commercials onto websites also occurs on the *MuchMusic* website, where teens can watch their favourite music video but not before a commercial is played (MuchMusic, 2007).

Bill Gates, founder of Microsoft, a leader in technology, believes that commercials people see will become more targeted to their specific interests as advertisers find high-tech ways to unite gadgetry such as cell phones, portable computers, and desktop computers to display advertising content (Burrell, 2006). This means that commercials are no longer limited to television screens, and the crossover to other digital devices dramatically increases people's exposure.

Commercials are so persuasive because they are constructed in a way that gains and holds viewer attention. Every commercial not only informs consumers about the product but also contains images, words, and sounds that combine to convey a strong message about appropriate behaviour, success, and happiness (Kline, 1993; Vestergaard & Schroder, 1985). For example, a commercial may imply that people will be more beautiful, successful, intelligent, or popular if they purchase the goods (Kline; Oliver, 1981). It is difficult for a casual viewer to notice the manipulation techniques because the action is happening so fast (Gottschalk, 1999; Kubey & Serafin, 2001). Everyone is susceptible to the messages contained in commercials, especially when they are seen repeatedly
(Berger, 1999). No matter the age, education level, or position of the person, advertisers know how to construct their ads so people will watch them and want to purchase the goods or services (Dow, 1981). With television advertisements crossing over onto any device with a computer screen (Burrell, 2006) exposure to commercials continues to rise. It is essential that educators cultivate media literacy skills in students, since commercials have the ability to shape people’s knowledge, attitudes, and behaviours.

About Teaching Media Literacy Skills

Throughout the world, educators are responding to the need for media literacy instruction. Curriculum documents are including media literacy learning outcomes, and teachers are designing media-related activities. However, are these efforts working? In this section, the efforts educators are making to teach media literacy skills are examined.

*Curriculum and Media Literacy Skills*

Educators recognize the need for media literacy. A growing number of countries are developing media education programs in their schools. For example, in the United Kingdom media-related learning objectives are part of the National Curriculum. Media education is also on the rise in the United States, with 48 states including media literacy learning objectives in their curriculum documents (Kubey & Baker, 1999). In Canada, all the provinces and territories have a media education component in their curricula (Media Awareness Network, 2007).

At the forefront of media education has been the province of Ontario. More than 15 years ago, the Ontario Ministry of Education (1989) recognized the
need for media literacy instruction and proclaimed disbelief that it had taken so long to become part of the curriculum. In response, they developed the Media Literacy Resource Guide containing teaching activities incorporating all forms of media including television, film, radio, music, video, photography, and print.

Throughout the years, curriculum documents have changed in the province of Ontario, yet media literacy remains a large part of K-12 learning expectations. In the elementary years, the oral and visual communication strand of the Language Arts curriculum places an emphasis on developing critical and analytical skills to respond to media. Specifically, by the end of grade 8, students should be able to "identify a wide range of media works and describe the techniques used in them; analyze and interpret media works; and create media works of some technical complexity" (Ontario Ministry of Education, 1997, p. 47). However, these curriculum documents are open to interpretation, allowing the teacher to design a wide range of activities to meet the learning expectations. That is, students may never critically examine the content of advertisements to gain an understanding of their persuasive influence on attitudes or behaviour.

At the secondary level in Ontario schools, media literacy skills are also emphasized. In the English curriculum, Media Studies is its own course for grade 11 students (course code EMS30). In this course, the aim is to:

[emphasize] knowledge and skills that will enable students to understand media communication in the twenty-first century and to use media effectively and responsibly. Through analyzing the forms and messages of a variety of media works and audience responses to them, and through
creating their own media works, students will develop critical thinking
skills, aesthetic and ethical judgment, and skills in viewing, representing,
listening, speaking, reading, and writing. (Ontario Ministry of Education,
2000b, p. 78)

Moreover, in the Arts curriculum the production of digital media is offered
starting at grade 10 (course codes: ASM20, ASM30 ASM40). In these courses,
the focus is upon using technologies such as video tools, photography equipment,
or the computer to produce media works (Ontario Ministry of Education, 2000a).
Although it is reassuring to know the Ontario Ministry of Education is taking the
need for media education seriously, it is disconcerting to realize that all the media
courses are optional. In fact, a preliminary study of course offerings in Ontario
secondary schools showed that the majority of media-related courses are not
offered (Love, 2004).

Unfortunately, very few students in Ontario may have learned about the
manipulation tactics used by advertisers before they graduate. This could explain
why so many adults are influenced by commercials to such a strong degree that
the companies that create advertisements influence the most important decisions
in their lives, including health care (Kravitz et al, 2005) and voting (Brader,
2005). Media literacy-related learning objectives are found throughout curriculum
documents, but in many cases this does not mean that students learn anything
about the persuasive tactics used in ads.
Many concerned educators recognize the need to have students become media literate. This has resulted in classroom activities in K-12 education that focus upon analyzing and producing media works. Numerous texts contain teaching ideas for elementary and secondary teachers. Each proposes ways to increase knowledge, cultivate a healthy attitude, and shape behaviour. In some cases, research has found that these activities enhance media literacy skills. What follows is an examination of the analytic and production activities that are recommended and the research that supports their use in the classroom.

Knowledge is considered an important way to offset the power of advertising (Adams & Hamm, 2000; Summers, 1997). In essence, it is believed that the more people know about commercials, the more they will be able to resist the messages. According to the Project Look Sharp handbook (Schiebe & Rogow, 2004) the knowledge that is thought to be essential includes identifying the source and purpose of advertising, recognizing the product and main message, describing the target audience, pinpointing selling techniques, discerning social values, and highlighting stereotypes.

There are several analytic activities proposed that are believed to help students recognize the source of the commercial and the purpose of advertising (Schiebe & Rogow, 2004). One analytic activity that is thought to help students develop this type of media awareness is to study forms of advertising in daily life by having students look around their environment to notice the commercials, flyers, billboards, radio announcements, and logos (Ontario Ministry of
Education, 1989). It is thought this activity will help students recognize the omnipresence of ads. In addition, it is recommended students keep track of the advertisements viewed or heard during the day using a log book. This type of activity is believed to encourage students to consider their consumption of media messages (Lloyd-Kolkin & Tyner, 1991; Ontario Ministry of Education). Once students understand their exposure to advertising, it is recommended that teachers switch their focus to the economics of commercials by having students research the cost of making and broadcasting commercials. It is believed this activity will help students make the connection that companies spend money to make commercials because the ads successfully get consumers to purchase the advertised goods, thus making the company money (Ontario Ministry of Education).

The empirical data to support the use of analytic activities to increase knowledge about the purpose of advertising are inconclusive. In a recent study, 80% of students were more likely to agree with the statement, "People who create media messages are influenced a lot by the need to make money" before receiving media literacy instruction, and the level of agreement was not found to change after media literacy instruction (Kubey & Serafin, 2001).

There are also analytic activities that are recommended to help students identify the product and main message in an advertisement (Schiebe & Rogow, 2004). An activity that is thought to develop this type of media awareness is the examination of a commercial to identify the product, describe the sales message, and list characteristics of the advertised item. Afterwards it is recommended that
the actual product be compared to the commercial to notice how the item is similar or different from the advertised message (Lloyd-Kolkin & Tyner, 1991). It is believed this analytic activity will help students develop critical viewing skills. There is some evidence to support the belief that media literacy instruction increases the ability to understand the message in a commercial. Verkaik and Gathercoal (2001) found that high school students that took part in 15 media literacy lessons were able to better comprehend television advertisements than the control group that did not receive media literacy instruction.

Additional analytic activities are also recommended to help students determine the target audience for a commercial and describe how the ad is aimed for this particular group (Schiebe & Rogow, 2004). An activity that is believed to develop this type of media awareness is to analyze a commercial by listing attributes of the target audience, such as age, sex, and economic level (Ontario Ministry of Education, 1989). Research findings support the use of media literacy instruction to teach knowledge of target audience. In a recent study, students were able to list more attributes of the target audience after they took part in media-based activities. However, despite being able to describe the target audience, the participants failed to recognize that advertisers construct commercials to target this group. Researchers found there was no substantial change in the agreement towards the statement, "People who create media messages do a lot of thinking about how to attract audience in their messages" after media literacy instruction (Kubey and Serafin, 2001).
Both production and analytic activities are recommended to help students recognize selling techniques and how they are used to manipulate the thinking of an audience (Schiebe & Rogow, 2004). Selling techniques include both persuasion tactics and production techniques. One analytic activity that is recommended to develop media awareness of persuasion tactics is to deconstruct commercials to notice the language, visual features, and content (Ontario Ministry of Education, 1989). Another teaching idea is to provide students with a list of persuasive appeals. As a group, students use this list to analyze the methods used by advertisers to sell their product (Lloyd-Kolkin & Tyner, 1991). Another activity that is believed to be useful when teaching about selling techniques is to have students pair a logo, cartoon character, jingle, or slogan with a product to gain an understanding of how these methods make a product memorable (Summers, 1997). There are empirical data to support the use of analytic activities to increase knowledge of selling techniques. In a recent study, research findings showed students were able to list more selling techniques used in a commercial after taking part in media literacy activities (Kubey & Serafin, 2001).

Aside from persuasion tactics, it is believed students need to know about production techniques used to sell a product. An analytic activity that is recommended is to count the number of shots in a commercial (Ontario Ministry of Education, 1989). Afterwards, students should deconstruct the ad to notice the editing techniques, transitions, and camerawork (Ontario Ministry of Education) and consider how they are used to convey product knowledge and attract viewer attention (Summers, 1997). Another analytic activity that focuses on the purpose
of production techniques is a memory quiz. In this task, teachers show commercials and then ask questions about the ad to demonstrate that despite the fast pace, the overall product message is easily recalled, but speed impairs the ability to remember specific details (Summers). There is evidence to support the use of analysis of production techniques to increase media literacy skills. Hobbs and Frost (2003) studied grade 11 students enrolled in a year-long English course. Although the media literacy activities were not limited to the study of advertisements, findings showed that the students were able to better identify construction techniques used in media messages after receiving media literacy instruction.

Another activity that is recommended to help students learn about selling techniques is to produce a commercial. Worsnop (1994) argues that making a commercial helps students to understand that media texts are constructed products and that the creator has made deliberate choices for distinct purposes. The commercial can be made by acting out a dramatization (Ontario Ministry of Education, 1989) or by videotaping the production (Race, 2003; Worsnop). It is recommended that students use a storyboard when planning their commercial (Lloyd-Kolkin & Tyner, 1991). After completing this activity, it is suggested that students analyze their commercial to notice the selling techniques, social values, and stereotypes contained within the ad (Ontario Ministry of Education).

At this time, there is a lack of empirical data to support the belief that producing commercials increases media literacy skills. Tyner (1994) states the reason for this oversight is that teachers have not had the luxury of reflecting on
the phenomenon of hands-on video use in elementary and secondary schools. The reason cited is that this type of activity takes a large amount of support and technical assistance, restricting teachers in their ability to engage in formal, replicable studies. The lack of quantitative data limits the ability to link an enhancement in media literacy skills to this type of production activity.

Analytic activities are recommended to help students discern social values contained within the ad and understand how they influence the viewer (Schiebe & Rogow, 2004). An activity that is believed to develop this type of media awareness is to analyze commercials from the perspective of an intelligent alien. By assuming this role, students consider the knowledge that commercials convey to an outsider about values such as beauty, happiness, and relationships. Afterwards, teachers are encouraged to lead a discussion about how individuals’ view of reality is affected by advertisements (Ontario Ministry of Education, 1989). There are empirical data to support the use of analytic activities to increase knowledge about social values. In a recent study, research findings showed students were able to list more social values in a commercial after taking part in media literacy activities (Kubey & Serafin, 2001).

Additional analytic activities are proposed to help students detect stereotypes and understand how they distort people’s perceptions (Schiebe & Rogow, 2004). An activity that is believed to develop this type of media awareness is to have students analyze commercials to keep track of the various subsets represented in the commercials, such as ethnic groups and gender. Afterwards, teachers should lead a discussion about their findings to draw
attention to who is included and excluded (Summers, 1997). Once students are aware of stereotypes, they need to consider how these generalizations influence perceptions. One way to begin this analysis is by studying the details in commercials including obvious features such as character appearance and actions as well as subtle things such as who is doing the voiceover. Afterwards, teachers should lead a discussion about what these portrayals suggest about masculinity, femininity, and racial equality (Ontario Ministry of Education, 1989). Although there are opinion papers stating that media literacy instruction helps students detect biases (Learmont, 2003), there is a lack of quantitative data to support this claim.

Aside from knowledge, a healthy attitude is also considered a good defense against the power of advertising. A positive attitude includes skepticism (Summers, 1997) and a lack of materialism (DeAngelis, 2004). An analytic activity that is believed to cultivate healthy skepticism is to have students consider a time in their lives when they purchased an item that did not live up to the expectation presented by the advertisement. Afterwards, it is recommended teachers lead a discussion about why advertisers may bend the truth (Lloyd-Kolkin & Tyner, 1991). Another teaching idea that is believed to foster a skeptical attitude is journal writing. This task allows students to reflect upon media messages and make connections to personal experiences, which gives them an opportunity to analyze the reliability and biased nature of ads (Summers). There are some empirical data to support the use of analytic activities to foster healthy skepticism. In a recent study, Kubey and Serafin (2001) found that elementary
students who engaged in media literacy activities for one period a week from fall to spring were more likely to agree with the statement, "I don't trust TV advertising very much." These findings lend support to the belief that media literacy instruction cultivates a healthy attitude towards advertisers. However, to contradict these findings, Yates (2001) discovered that media literacy instruction had no influence on students' attitude towards commercials. The reason he found no difference may be due to the duration of the training. Children in the experimental group received only 60 minutes of instruction about persuasive techniques used by advertisers. This could be an inadequate amount of time to form a noticeable change in attitude towards commercials.

Although a lack of materialism is considered an important attitude, at this time analytic and production activities that focus on materialism in K-12 texts are difficult to find. According to Oliver (1981), the primary function of advertising in Canada and throughout the world is to promote the purchase of goods. For this reason, he states that advertising represents the voice of materialism. At this time no empirical data support the claim that media literacy instruction reduces materialistic values however, many believe that media-based activities minimize susceptibility to manipulation (Learmont, 2003).

In addition to knowledge and attitude, behaviour is also considered an important part of media literacy. One of the goals of media literacy instruction is for students to become active viewers that ask questions about what is contained in media messages (Lloyd-Kolkin & Tyner, 1991; Ontario Ministry of Education, 1989; Summers, 1997). Summers proposes a model to promote critical thinking
that includes a three-step process whereby students review, reflect, and react. Using this method, it is recommended that teachers pose questions about the content of the commercial such as the message, characters, and setting. Once students have thought about the details of the ad, they need to reflect. At this time, teachers should include a written reflective component, as it gives students an opportunity to consider how they feel about the message. Finally, teachers should design activities that allow students to take a stand, such as make a decision about whether to buy the advertised item. By following these three steps, it is believed students will be able to think critically about media messages. There are no empirical data that demonstrate this model promotes critical viewing. However, many people hold the opinion that media-based activities will help students acquire critical thinking skills (Learmont, 2003) and as a result, students will become intelligent consumers of media (Adams & Hamm, 2000).

What are educators doing to teach media literacy skills, and is it working? Education organizations are including media literacy-related learning objectives into curriculum documents (Kubey & Baker, 1999; Media Awareness Network, 2007). In response, educators are designing activities that help to cultivate critical viewing and an awareness of the persuasive tactics and production techniques used by advertisers (Lloyd-Kolkin & Tyner, 1991; Ontario Ministry of Education, 1989; Summers, 1997). There is a small body of research demonstrating that with instruction a change is noticeable (Hobbs & Frost, 2003; Kubey & Serafin, 2001; Verkaik & Gathercoal, 2001). However, what the findings do not show is whether it is analytic, production, or a combination of the two activities that is the most
effective form of instruction to cultivate media literacy skills. This raises the question, "What form of media literacy instruction is most effective in changing students' knowledge, attitudes, and behaviours towards commercials?"

Summary

There is a need for research that disseminates compelling evidence that the time engaged in media education enhances educational opportunities for students (Tyner, 2003). In this study, the forms of media literacy instruction that are most effective in changing students' knowledge, attitudes, and behaviours towards commercials were investigated. This is an important area of research because there is concern that television advertisements are shaping development (OECD, 1982). Ads contain not only information about goods but also stereotypical images and value-laden statements (Coltrane, 2000; Coltrane & Adams, 1997; Goffman, 1979; Kline, 1993) that, when viewed repeatedly, influence how people think and act (Percy & Woodside, 1983). The reason the commercials are so persuasive is that everything, including the language, actor, imagery, music, special effects, camera angles, and setting, are selected to gain and hold viewer attention (Lloyd-Kolkin & Tyner, 1991). It is often difficult for people to recognize the tactics used by advertisers because the action is happening so quickly (Gottschalk, 1999). In response to the need for students to become critical viewers, education organizations around the world are including media literacy learning objectives in their curriculum (Kubey & Baker, 1999; Media Awareness Network, 2007). Teachers are addressing these outcomes in their own instruction by designing analytic and production activities to cultivate media literacy skills.
There is a small body of research demonstrating that teaching media literacy does make a difference (Hobbs & Frost, 2003; Kubey & Serafin, 2001; Verkaik & Gathercoal, 2001). However, if teachers are going to dedicate classroom time to media literacy training, then there is a need to identify the most effective method of instruction (Tyner, 2003).
CHAPTER THREE: METHODOLOGY

In this study, the form of media literacy instruction that is most effective in changing students' knowledge, attitudes, and behaviours towards commercials was investigated. The design was based on the research study conducted by Kubey and Serafin (2001), who examined the effectiveness of a media literacy curriculum upon student learning. Modifying the original study, a comparative analysis of various forms of media literacy instruction was used to show which method had the most influence on changing grade 8 students' knowledge, attitudes, and behaviours towards commercials. To gain an understanding of the research study, an examination of the methodology and design, pilot study, selection of site and participants, materials and instrumentation, procedures, data collection and analysis, methodological assumptions, limitations, credibility, and ethical consideration is described.

Research Methodology and Design

This research was approved by the Brock Research Ethics Board (see Appendix A). In the current study, different forms of instruction were compared to determine which method resulted in an increase in media literacy skills. Using a mixed method research design that included both quantitative and qualitative data, the form of media literacy instruction that was most effective in changing students' knowledge, attitudes, and behaviours towards commercials was investigated. In addition, the difficulties faced by educators and effective strategies to overcome the obstacles were examined. To understand the
methodology and design, the rationale for the mixed method design is explained. Once this has been established, the research questions are outlined.

Rationale for Research Design

This research used a mixed method design. A mixed method design uses both qualitative and quantitative research. According to Best and Kahn (2006), many education-based research questions often need to use both methods. Quantitative data can be used to measure the change in student achievement. Qualitative data can be used to describe the classroom environment, teaching experience, and activities. Since this study, was interested in not only the change in media literacy but also effective teaching strategies to overcome difficulties when teaching media literacy activities, both research methods were used.

To gather quantitative data a quasi-experimental design was applied to the study. In a quasi-experimental design the researcher assigns participants to groups; however, the assignment is not random. According to Creswell (2002), in education this design is very common because groups occur naturally in schools. Participants are already organized into intact groups based upon their attendance at a particular school or placement in a class. In this study, participants were assigned to a treatment based on the school they attended. Each eighth-grade class at a school was assigned to one of the treatments.

A pre/post design was then applied to the quasi-experimental design. Using the intact groups, the researcher administered a pretest to the four groups. Afterwards, the treatment was given to each group. Upon completion, a posttest was administered to assess the difference between the groups in their knowledge,
attitudes, and behaviours towards commercials. According to Best and Kahn (2006), this is a strong research design, because the pretest controls for any differences between the groups at the beginning of the study. However, a pre/post design has some pitfalls. To reduce maturation effects, which are caused by the participants getting older, history effects, which are caused by events occurring outside the study, and testing effects, which are caused by measuring the dependent variable twice using the same instruments (Reaves, 1992), a control group was used.

A field study approach was then applied to the existing quasi-experimental design to gather qualitative data. Field study is an ethnographic approach used by researchers to gather data in the setting where the participants are located. It includes various methods of data collection such as interviews, observation, and documents. According to Creswell (2002), the focus of field study is to examine human behaviour to notice patterns. In this research, students and teachers were studied to notice their response to media literacy activities. This information was then used to gain an understanding of difficulties and effective teaching strategies.

Research Questions

In this study, the activities that result in a change in media literacy skills were investigated. This is an important area of study because if teachers are going to dedicate classroom time to media education, then there is a need to identify the most effective method of instruction. Specifically, four questions were investigated. Does media literacy instruction result in a change in students' knowledge, attitudes, and behaviours towards commercials? What type of media
literacy instruction is the most effective in changing students' knowledge, attitudes, and behaviours towards commercials: activities that have students analyze commercials; activities that have students produce commercials; or activities that have students analyze and produce commercials? What obstacles do teachers need to overcome when engaging in media literacy activities? And what are teaching strategies that educators can use when engaging in media literacy activities to overcome obstacles?

Pilot Studies

There was concern when designing the study that technical issues arising from the use of video editing and capture equipment could overshadow the learning in the Production and Analysis and Production groups. This concern was based on Tyner’s (1994) observation that the reason more research had not been gathered about video production was that it takes a large amount of support and technical assistance. For this reason, the curriculum development team from a Canadian publishing company of technology-based instructional materials tested the design of video production activities. Previous research in the area of video production conducted by this company, with children ages 7-12 in a summer computer camp setting, showed technical issues and problems with the timing of instruction that would make it difficult to teach video capture and editing in a school setting. To gain an understanding of the most effective design for activities, a grade 4 class participated in a pilot study.

These students learned about video production for the period of 2 months, once a week, during the regularly scheduled computer class. They engaged in the
following activities: study a sample video and deconstruct the components, experiment with the video camera to determine the most effective settings and capture techniques, learn how to use video editing software by altering raw footage, storyboard ideas, capture video, edit footage using video editing software, view completed nursery rhymes, and discuss techniques.

Throughout the pilot study, observational notes were taken after each lesson to reflect on the quality of activities, timing, students' responses, technical issues, and method of resolution. In addition, digital photos were taken of the process, and video was recorded of the experience. The curriculum development team then reviewed the data to gain an understanding of the types of activities and the instructional time necessary for video production. As well, technical issues relating to saving and transferring of files, arrangement of the computer lab, sharing of equipment, and freezing of computers were discussed.

There was a desire to limit the technical difficulties that often arise when technology is integrated into learning. The findings from the pilot study were used to inform the development of the curriculum unit used within the study. This helped to ensure that the video production activities were well timed and appropriate for a school setting.

Selection of Site and Participants

The selection of the site and participants was a crucial element of this study. This is because there was a need for sites that had adequate computer equipment, a suitable number of grade 8 students, and a location that was within a
reasonable driving distance. How the sites were selected for this study and a
description of the participants is described in this section.

Recruitment

The participants were recruited from four schools that belonged to the
same Christian school affiliation. To locate sites to participate in the research,
principals that had an interest in media literacy were contacted. An email was then
sent that provided a brief explanation of the study. Once the principal of a site had
shown an interest in the study, additional information was provided to the school
administration. In some cases, at the request of the principal, a presentation was
given to the Education Committee to describe the study and answer questions.
Once the school administration verbally agreed to participate in the research, the
grade 8 teacher of the organization was contacted to gain his or her support for the
study. When this had been obtained, the principal received a general letter of
introduction and a consent form. The principal read the documents, signed the
consent form, detached the bottom portion of the form, and submitted it to the
researcher. A meeting time was then established with the teacher to discuss in
more detail the activities and classroom schedule. At that meeting, the teacher
received a letter of invitation and a consent form. Grade 8 students were then
introduced to the study, and a letter of invitation was sent home to parents with a
consent form. At a convenient time, the researcher collected all consent forms
from the site.
Participants

Participants involved in the study were from Christian schools. Each site was randomly assigned to a treatment: Control group, Analysis group, Production group, or Analysis and Production group. In this study, there were 94 students and 4 teachers. Each group followed the same language arts curriculum. The student participants had similar language abilities, with each group having an average class score of 78-80% in language arts. The student participants came from predominantly urban, lower to upper middle class Christian families, and all attended private schools. Four teachers, 1 from each site, participated in the study.

Materials

Media literacy activities were taken from a technology project published by a Canadian publishing company. This project was selected because it included analysis and production activities related to commercials. Moreover, the instructional materials contained teaching strategies and detailed instructions that helped maintain consistency amongst the groups.

Participants in the Analysis group engaged in media literary activities that required them to analyze the content of commercials by viewing advertisements using Windows Media Player. Topics included the purpose of advertising, target audience, selling techniques, social values, and stereotypes. For an outline of the assignments, refer to Appendix B. To review a sample of the activities, refer to Appendix C, Appendix D, and Appendix E.

Participants in the Production group engaged in media literacy activities that required them to create their own advertisement using video production
equipment and Windows Movie Maker. Topics included how to operate a camera and use software to edit video footage. For an outline of the assignments, refer to Appendix B. To review a sample of the activities, refer to Appendix E and Appendix F.

Participants in the Analysis and Production group completed the same analysis activities as the Analysis group and the same production activities as the Production group. For an outline of the assignments, refer to Appendix B. To review a sample of the activities, refer to Appendix C, Appendix D, Appendix E, and Appendix F.

Participants in the Control group did not engage in media literacy activities. Instead, they engaged in digital art activities using the program PhotoFiltre. They created artwork that reflected their mood, style, and interests.

Instrumentation

This study was designed to answer whether forms of media literacy instruction foster media literacy skills and to identify effective strategies that can overcome difficulties when teaching. To answer these questions, multiple measures were used including surveys, questionnaire, test, student workbook, reflective journal, and an interview. Specifically, the instruments used in this study were the Exposure to Media Survey, Media Literacy Rating Scale, Media Literacy Test, Student Assignments, Reflective Journal, and Interview. The Exposure to Media Survey, Media Literacy Rating Scale, and Media Literacy Test were adapted from the study conducted by Kubey and Serafin (2001). These instruments were selected because they contained a range of questions that
measured knowledge, attitudes, and behaviours. Moreover, the instruments included an analytic component that had students watch commercials and deconstruct the content, a skill that was relevant to this study. In this section, a detailed description of each instrument is outlined, as well as information about their development.

*Exposure to Media Survey*

The Exposure to Media Survey was used to control for variables that could influence students' access to media and advertising. The argument could be made that students who see more media or advertisements are more "media literate." Based on this possibility, the Exposure to Media Survey was used to measure the amount of media and advertising students read, view, and hear. The Exposure to Media instrument had two parts (see Appendix G). Part 1 measured the exposure to media based on the number and location of devices in the home, and Part 2 measured the exposure to advertising based on the types of activities participants do in their spare time. An explanation of the Exposure to Media Survey is provided below.

*Part 1 of the exposure to media survey.* The first part of the Exposure to Media Survey measured the amount of exposure students had to media based on the number and location of media devices in the home. Of particular interest was the number of devices in participants' bedrooms. Often adolescents do not have control over what they read, view, or hear when the media device is shared with other family members. However, with the device in their bedroom they have more power over the media that they intake, and it is easier for them to consume more
media messages. To measure exposure to media, participants completed a survey to indicate the number of devices in their homes and if they were located in their bedrooms. The devices on the list included television, VCR, DVD player, computer with the Internet, computer without the Internet, video game system, radio, CD player and/or MP3 player, and phone and/or cell phone.

The design of Part 1 in the Exposure to Media Survey is very similar to the original tool used in the Kubey and Serafin (2001) study. This instrument was tested with 26 grade 7/8 students. It took 3 minutes to complete. After taking the test, the students' opinions of the instrument were discussed. In the original design of the instrument, only CD player was listed for playing recorded music. The students stated that an MP3 player was missing as a device. Since many of these devices are often combined with a CD player and both have a similar function to play music files, this item on the test was reworded to CD player and/or MP3 player. The instrument was then retested with 21 grade 7 students. They had no trouble completing the survey. The newly worded item was not a source of confusion to the students and for this reason appears in the final version of the tool. However, after completing the survey, students stated they wanted the item "video game player" worded as "video game system," because they believed it is a more common term. The suggested change was made to the instrument, and it appears in the final version of the tool. The Exposure to Media Survey instrument is available in Appendix G.

*Part 2 of the exposure to media survey.* The second part of the Exposure to Media Survey measured the amount of advertising students encounter. The
argument could be made that students who see more media with advertising are more media literate because the high level of exposure makes them aware of the persuasive and production techniques. Based on this possibility, the Exposure to Media instrument surveyed how participants spend their time outside of school on a typical weekday. Activities were listed with large amount of advertising including: watch television, surf the Internet, listen to the radio, email using the computer, read magazines, and participate in a sport/club. As well, there were also activities that contained very little or no advertising including: watch movies, play video games, listen to CDs or music files, talk on the phone, chat using the computer, and read books. Participants indicated the amount of time they spent doing each activity (i.e., none, 30 minutes, 1 hour, 2 hours, 3 hours, or 4+ hours). To understand the information they disclosed, participants indicated if they multitasked while doing the activity and offered a description of the other tasks.

The design of Part 2 in the Exposure to Media Survey was different from the original tool used in the Kubey and Serafin (2001) study. Modifications were made to the content and layout based on results from field testing. In the initial field test, the survey was given to 26 grade 7/8 students. It took 5 minutes to complete. After taking the survey, the students' opinion of the instrument was discussed. The students stated that there were several items missing on the list including talking on the phone and chatting through the computer. These items were added to the list.

The initial field test also showed a flaw in the instrument. After reviewing the results of the survey it was discovered that the total hours reported by students
was often well above a reasonable period; the results would mean the students slept for only a few hours. It was possible that this type of test was too difficult for students to complete accurately. However, upon further investigation it was revealed that the high number of hours reported was a direct result of students multitasking. The field test showed students do several activities at one time. For example, they may chat on the computer while they listen to music files and surf the Internet. To understand how adolescents spent their time and to ensure the tool was not too difficult to complete, the survey was modified. A column was added to the survey allowing students to indicate for each item whether they do the activity at the same time as something else. If they multitask, they needed to indicate in the box the other things they did while engaged in the activity.

Another adjustment made to the instrument was a modification to the time options that participants could select for each activity. Initially the range of choices went from 0 to 6+ hours. However, in the initial field test very few students reported more than 4 hours spent on a particular activity. For this reason, the time options were changed to range from 0 to 4+ hours.

The instrument was then retested with 21 grade 7 students. They had no trouble completing the survey, although it took them significantly longer. The list of activities was complete, and no students complained about a missing item. In addition, they had no trouble stating whether they multitasked. After studying the results, consistency could be found in the reporting. For example, if students claimed that they chatted on the computer while listening to music, then they also stated that they listened to music when they chatted on the computer. This type of
reporting accurately explained how participants spent their leisure time, and it was concluded that this instrument was easy for participants to understand. It was also noted in the second field test that the modified time options were sufficient, and for this reason they appear in the final version of the survey. The Exposure to Media Survey can be viewed in Appendix G.

*Media Literacy Rating Scale*

A Media Literary Rating Scale was used to measure students' attitude, behaviour, and knowledge of commercials (Appendix H). Using this instrument, participants rated their agreement towards 21 statements. For each statement, they selected a response from five options (i.e., -2 *strongly disagree*, -1 *disagree*, 0 *unsure*, 1 *agree*, and 2 *strongly agree*).

Specifically, the Media Literacy Rating Scale contained eight statements that measured students' knowledge of commercials including their understanding of the purpose, target audience, production techniques, and persuasion tactics (Appendix H: Media Literacy Scale statements 14-21). The scale also included six statements that measured students' behaviour related to commercials. These questions were intended to determine how students respond when viewing ads, whether students analyze what they see, and if ads influence their consumer habits (Appendix H: Media Literacy Scale statements 8-13). The remaining seven statements were about students' attitude towards commercials. There were two statements intended to gain an understanding of materialistic values, four statements about confidence in advertisements, and one statement about the importance of media literacy (Appendix H: Media Literacy Scale statements 1-7).
The Media Literacy Rating Scale was field tested with 26 grade 7/8 students. There was some concern they might not understand the numbering system on the scale. However, the students had no difficulty with the instrument. This is likely due to the explanation about the numbering system prior to completing the scale. A thermometer was placed on the board with the numbers -2, -1, 0, 1, and 2 placed alongside to show the temperature. Students were told that a positive number meant they agreed with the statement. Circling a 1 meant they were "warm" to the statement. Circling a 2 meant they were "hot" to the statement, whereas a negative number meant they disagreed with the statement. Circling a negative 1 meant they were "cold" to the statement. Circling a negative 2 meant they were "freezing" towards the statement. To understand this concept, the statement "Cold Play is the best band in the world" was written on the board. Below the sentence was a scale just like the one in the instrument. Students were asked to state their opinion towards the statement by rating it using the scale. Students who had never heard of Cold Play selected a zero, because they were unsure. However, those that liked the band selected a positive number, whereas those that disliked the band selected a negative number. To confirm there was no difficulty with the tool it was retested with 21 grade 7 students. The results revealed that students had no trouble completing the rating scale. A sample of the instrument is available in Appendix H.

Media Literary Test

To understand further students' level of media literacy, participants completed the Media Literacy Test (see Appendix I). This instrument was
designed to measure students' knowledge of media, with a specific focus on commercials. It included multiple choice in Part 1 and short answer questions in Part 2.

*Part 1 of the media literacy test.* Part 1 of the Media Literacy Test measured an understanding of concepts such as media, advertising, target audience, and stereotypes. This section of the test consisted of five multiple-choice questions. The first question had participants circle five types of media from a list of eight items. The second question had participants circle five types of advertising from a list of eight items. The third question had participants circle eight items that advertisers sell to people their age from a list of 12 choices. The last two questions were based on definitions. Participants had to select from a list the correct meaning for the terms target audience and stereotypes.

Part 1 of the Media Literacy Test was field tested with 26 grade 7/8 students. It took 5 minutes to complete. After taking the test, the students' opinions about the instrument were discussed. The students had no trouble with the wording of the questions. However, problems were revealed with the target audience and stereotype multiple-choice questions. Almost every student circled the right answer indicating an understanding of the term. However, students had limited success in applying their knowledge in Part 2 of the Media Literacy Test when they had to describe the target audience or identify stereotypes after watching a commercial. This indicated a strong possibility that they did not understand the definition of the term. Instead, it was likely they had selected the correct definition by eliminating the wrong answers from the choices. To remove
this as a possibility, new choices were added for each term. The instrument was then retested with 21 grade 7 students. The new options for the multiple choice questions were more suitable, and results showed a range in correct answers. The final version of the Media Literacy Test is available in Appendix I.

Part 2 of the media literacy test. Part 2 of the Media Literacy Test was used to measure students' abilities to apply their knowledge to analyze the content of advertisements. In this section of the test, participants viewed two commercials, one for financial planning and the other for a toy. Afterwards they answered six short answer questions about the content of the ad including the purpose, target audience, selling techniques, main message, social values, and stereotypes.

Part 2 of the Media Literacy Test was field tested with 26 grade 7/8 students. It took 20 minutes to complete. After taking the test, students' opinions of the instrument were discussed. The students stated they had no trouble with the wording of the questions. However, the scoring method was viewed as subjective. For this reason, it was revised. The instrument was then retested with 21 grade 7 students. These test results were scored by two people using the modified scoring system. The final version of the Media Literacy Test with its modified scoring is available in Appendix I.

Student Assignments

Student assignments were used to establish the pacing of instruction. Participants completed assignments as part of instruction. The assignments were compiled in a workbook. Each workbook was collected after each class and
reviewed to gauge students' understandings of the concepts. In addition to the worksheets for each media literacy assignment, there were also worksheets about parental restrictions and television viewing behaviour.

The Parental Restrictions Worksheet was used to gain an understanding of whether or not parental restrictions limited their children's exposure to media or advertising. Since the argument could be made that Christian parents place more restrictions on their children, it was important to gain an understanding of participants' media consumption. The Parental Restrictions Worksheet listed a series of activities including watch television, watch movies, surf the Internet, play video games, listen to the radio, listen to CDs or Music Files, talk on the phone, chat using the computer, email using the computer, read magazines, and read books. For each activity, participants used a checkmark to indicate if parents restricted their behaviour. If the "yes" checkbox was marked, participants wrote a description of the restriction. The results were then examined to determine if the parental restrictions influenced exposure to commercials.

The Television Viewing Behaviour Worksheet was used to understand the type of television shows viewed. Since the argument could be made that Christian adolescents watch different television programs and channels than other adolescents, there was a need to learn about participants' viewing behaviours. Students were asked to either email or write onto the worksheet their three favourite television shows and include the day, time, and stations for each program. This information was then used to gain an understanding of the types of commercials participants were viewing.
The Television Viewing Behaviour Worksheet also included a question about the access to devices that record a television program. To understand viewing behaviours, participants were asked if they owned a recordable device and whether they viewed the commercials if they watched a recorded television show. This information was used to gain an understanding of the exposure to commercials in light of modern technology that makes it possible to avoid television advertisements.

Reflective Journal

The Reflective Journal was completed by the researcher and used to study the implications of media literacy instruction for teachers. After teaching each assignment, the researcher recorded information about the activities, student responses to the tasks, issues faced, and strategies used to overcome the obstacles. The content of the journal was analyzed for common themes to gain an understanding of the obstacles faced when teaching media literacy skills and effective strategies that help to overcome the difficulties.

Interview

The Interview was used to gain a deeper understanding of the implications of media literacy instruction for teachers. At the end of the research project, the researcher interviewed the grade 8 teachers to learn about their opinion of the activities, perception of students' response, and suggestions for overcoming difficulties when teaching media literacy skills. Answers to the questions were audiotaped. The interview was then transcribed and the content of the written transcripts analyzed for common themes to gain an understanding of the obstacles
faced when teaching media literacy skills and effective strategies that help to
overcome the difficulties.

Procedures

Each grade 8 class at a site was randomly assigned to one of four groups
including a Control group, Analysis group, Production group, or Analysis and
Production group. Over the period of 4 months, the researcher implemented
media literacy activities with assistance from the classroom teacher. The
researcher was responsible for teaching each class, assisting students, and
marking each assignment. The classroom teacher assisted throughout each class
by clarifying information, providing examples, answering questions, resolving
technical issues, or completing classroom management tasks such as distribution
or collection of student workbooks. All student assignments were completed by
participants during the regularly scheduled computer class. The classroom teacher
attended each class and facilitated where possible. The Control, Production, and
Analysis groups completed 360 minutes of instruction from January to April. The
Analysis and Production group completed 440 minutes of instruction from
January to April. Although the difference in time can be viewed as an extraneous
variable (Johnson & Christensen, 2004), it was determined that the time
difference was unavoidable due to the nature of the study. The purpose of the
study was to compare the effectiveness of media literacy activities. For this
reason, the same activities completed by participants in the Analysis group and
Production group were also completed by the Analysis and Production group. The
combination of activities resulted in 80 minutes more of instruction. Although this
time difference is a limitation to the study, it was necessary to avoid a difference in learning opportunities becoming an extraneous variable.

All student participants were given a pretest that included the Exposure to Media Survey, Media Literacy Rating Scale, and Media Literacy Test at the start of the study period. Following the pretest, participants in the Control group received no media literacy instruction. Instead, they engaged in digital art activities. After the instructional period, they completed a posttest that included the Media Literacy Rating Scale and Media Literacy Test.

Following the pretest, participants in the Analysis group completed a set of tasks designed to teach media literacy skills. The assignments had students view commercials using Windows Media Player and then deconstruct the content to gain an understanding of target audience, message, social values, stereotypes, and persuasive tactics used by advertisers. Upon completion of the media literacy activities, participants completed a posttest that included the Media Literacy Rating Scale and Media Literacy Test.

Following the pretest, participants in the Production group completed a set of tasks designed to teach media literacy skills. The assignments involved the use of the computer to produce a commercial using video capture devices and the video editing program Windows Movie Maker. The assignments were designed to inform students about the production techniques used when making commercials such as camera angle and movement, special effects, and voiceovers. They were given an opportunity to evaluate the content of commercials to recognize these methods. This group of participants then applied their knowledge to produce their
own commercials, employing the same production techniques used by advertisers. They videotaped their commercials and edited the content in Windows Movie Maker. Upon completion of the production activities participants completed a posttest that included the Media Literacy Rating Scale and Media Literacy Test.

Following the pretest, the Analysis and Production group completed a set of tasks designed to teach media literacy skills taken from the curriculum unit TechnoCommercial. The assignments were the same as the Analysis group and Production group. The activities involved the use of the computer to analyze and produce commercials. Commercials were viewed in Windows Media Player and then the content deconstructed to gain an understanding of target audience, message, social values, stereotypes, and persuasive tactics used by advertisers. Participants then used video capture devices and the video editing program Windows Movie Maker to create a television advertisement. The assignments were designed to inform students about the production techniques such as camera angle and movement, special effects, and voiceovers used when making commercials. Upon completion of the assignments, participants completed a posttest which included the Media Literacy Rating Scale and Media Literacy Test.

When the study was complete, all participants received a letter, thanking them for their participation. Once the results were analyzed, participants were provided with a summary document outlining the research findings. At that time, a presentation was given to the Education Committee to share the research results, at the principal's request.
Data Collection and Recording

Several instruments were used to collect and record data. These included the Exposure to Media Survey, Media Literacy Rating Scale, Media Literacy Test, Student Assignments, Reflective Journal, and Interview. Each instrument was used to provide a deeper understanding of media literacy.

The Exposure to Media Survey was completed by student participants as a pretest during a regularly scheduled classroom period. Participants were asked to self-report on the availability of media and their consumption of various forms. Using a pencil, they circled the correct response from a series of options. Once the survey was complete, they were collected by the researcher and the information was inputted into MS Excel and later transferred into SPSS Software.

The Media Literacy Rating Scale was completed by student participants as a pretest and posttest during a regularly scheduled classroom period. Participants were asked to self-report on their degree of agreement with 21 statements. Using a pencil, they circled a response from a series of options. Once the scale was complete, they were collected by the researcher and the information was inputted into MS Excel and later transferred into SPSS Software. When the data was inputted into SPSS the scale (i.e., -2 strongly disagree, -1 disagree, 0 unsure, 1 agree, and 2 strongly agree) was converted to numbers that ranged from 0 to 5 (i.e., 1 strongly disagree, 2 disagree, 3 unsure, 4 agree, and 5 strongly agree).

The Media Literacy Test was completed by student participants as a pretest and posttest during a regularly scheduled computer class in the computer lab. Using a pencil, participants circled the correct responses from five multiple-
choice questions about media-related terms. Afterwards, they used Windows Media Player to view two commercials. Students were able to view the commercials multiple times. After watching each commercial, they completed short answer questions about the product, target audience, selling techniques, message, social values, and stereotypes. Once the test was complete, they were collected by the researcher and the information was inputted into MS Excel and later transferred into SPSS Software.

The Student Assignments were completed by participants. After each class period, the assignments were collected and then reviewed by the researcher and classroom teacher. The information contained within the assignments helped to establish the pacing of instruction, as the quality of answers indicated participants' understanding of the concepts. The data from the Parental Restrictions and Television Viewing Behavior worksheets were collected by the researcher and the information inputted into MS Excel.

The Reflective Journal was kept by the researcher. After each class period, the researcher recorded observations and thoughts about the activities, student response, issues faced, and strategies to overcome obstacles. The handwritten reflections were then expanded upon using word processing software that same day to create a Reflective Journal.

The Interview with the classroom teacher at the end of the study contained open-ended questions about the experience of facilitating learning in the teaching of media literacy activities. The interview took place in a private location at a time that was convenient to the participant. The interview was audiotaped using a
digital recorder. The digital audio file was coded and transcribed. The teacher then received a copy of the transcription to review the content. If the data did not accurately reflect the participant's thoughts or the teacher wanted to expand upon his or her statements, the content was modified.

Data Processing and Analysis

Several methods of data processing and analysis were used in this research. To control for students' media consumption habits as an extraneous variable, the Exposure to Media Survey and Parental Restrictions and Television Viewing Behaviour worksheets were used. To measure the level of media literacy in order to determine whether there was a change after intervention the Media Literacy Scale and Media Literacy Test were used. To gain a deeper understanding of the difficulties educators face when teaching media literacy and the teaching strategies they can use to overcome these obstacles, the Interview and Reflective Journal were used. The data processing and analysis of each instrument is described in this section.

Analyzing the Exposure to Media Survey

The Exposure to Media Survey was used to measure the amount of media and advertising students read, view, and hear. It contained two parts. In part one, participants indicated the number of devices in their home and if they were located in their bedrooms. Based on this information, an Exposure to Media score was calculated. To score this survey, 1 point was allocated for each media device in the home, with 2 points given for each item in a bedroom. The highest possible score was 54. The results were used to rate participants as having high, medium,
or low exposure to media. High exposure participants scored 37-54; medium exposure participants scored 19-36; and low exposure participants scored 0-18.

Not all media contain advertising. For this reason, the second part of the Exposure to Media Survey measured the amount of advertising students encounter. In part two, participants indicated the time they spent doing activities on a typical weekday. To calculate an Exposure to Advertising score, the time spent doing activities that contain a large amount of advertising, including watch television, surf the Internet, listen to the radio, email using the computer, read magazines, and participate in a sport/club, were summed together. The results were used to rate participants as high, medium, or low exposure to advertising. Since the average student has approximately 9 hours of free time, the following ranking system was created. A high exposure participant spends 6.1 hours or more doing activities that contain advertising; a medium exposure participant spends 3.1-6 hours doing activities that contain advertising; and a low exposure participant spends 0-3 hours doing activities that contain advertising.

A Spearman rank order coefficient of correlation statistical test was used to measure the relationship between the media literacy ranking derived from the Media Literacy Scale and Media Literacy Test results and level of exposure to media and advertising ranking derived from part one and part two of the Media Literacy Survey. According to Best and Kahn (2006), this type of test is appropriate for correlating two sets of variables that are ordinal data. For this reason, this statistical test was used to determine if participants who have a high level of exposure to media also have a high level of media literacy and to
determine if participants who have a high level of exposure to advertising also have a high level of media literacy.

To understand the information disclosed on the Exposure to Media Survey, participants indicated if they multitasked while doing the activity and offered a description of the other tasks. The number of activities in which participants' multitask was then summed. This information was then used to categorize participants' behaviour as no multitasking, multitasking on 1-2 activities, multitasking on 3-4 activities, and multitasking on 5+ activities. The multitasking ranking was then correlated with the level of exposure to advertising ranking derived from the Exposure to Media Survey. This information was correlated using a Spearman rank order coefficient of correlation test to measure the degree of relationship between the level of exposure to advertising and multitasking behaviour. This type of test is suited to correlating two sets of ordinal data (Best & Kahn, 2006) and is an appropriate statistics test to determine if students who multitask have a higher level of exposure to advertising than those adolescents who do not multitask.

To summarize students' media consumption, crosstabs using SPSS software were used to calculate frequency counts and the percentage of participants that had a particular level of exposure, type of media device, and engaged in specific activities. A crosstab was deemed appropriate for this purpose because it is a table that organizes categorical data to make it easy to make comparisons (Johnson & Christensen, 2004) and it provides descriptive statistics that can be used to describe responses to questions (Creswell, 2002).
Analyzing the Media Literacy Rating Scale

A Media Literacy Rating Scale was used to measure students' attitude, behaviour, and knowledge of commercials. Using this instrument, participants rated their agreement towards 21 statements using a 5-point Likert scale. A media literacy score was calculated based on the results of the Media Literacy Rating Scale. The final score for respondents on the scale is the sum of their ratings for all of the items. Six of the statements had a reverse meaning from the overall direction of the scale. Those response values were reversed for each of these items before summing the total. That is, if the respondents gave a -2, it becomes a 2; if they gave a -1, it becomes a 1; 0 remains the same; if they gave a 1, it becomes a -1; and if they gave a 2, it becomes a -2. This resulted in a possible score of 42. This score was used to measure a difference between the pretest and posttest results to determine if there was a change in media literacy skills.

A factorial analysis of variance was performed to examine if there was a statistically significant change in the Media Literacy Rating Scale score among the groups of participants between the pretest and the posttest. Specifically, a split plot design was used because this is recommended for pretest-posttest designs (Garson, 2007). Since there were four treatment groups (Analysis, Production, Analysis and Production, Control) and the test was given at two separate times, this type of test is called a 4 (condition) x 2 (time) factorial analysis of variance. According to Best and Kahn (2006), a factorial analysis of variance is a powerful statistical tool.
The score from the Media Literacy Rating Scale was also used to rank participants as having high, medium, or low media literacy levels. A high media literacy level was a score of 29+. A medium media literacy level was a score of 15-28. And a low media literacy level was a score of 0-14. As previously mentioned, the level of media literacy ranking was correlated with the level of exposure to media ranking and level of exposure to advertising ranking derived from the Exposure to Media Survey, using a Spearman rank order coefficient of correlation test.

Moreover, descriptive statistics were also analyzed to gain an understanding of participants' opinion towards statements about knowledge, attitudes, and behaviours towards commercials. Crosstabs were generated using SPSS software. Statistics included frequency counts and percentages of participants that indicated a particular level of agreement. This method of analysis was deemed appropriate because according to Creswell (2002), descriptive statistics can be used to present information about participants' responses to questions. For some statements, the data were recoded to condense opinions to either agree or did not agree. A Chi-square test was then used to determine if there was a significant difference amongst the groups. According to Johnson and Christensen (2004), a Chi-square test is used when the data are categorical. This test shows the association between two variables (Creswell); in this case, it compares the level of agreement listed by participants in each treatment group.
Analyzing the Media Literacy Test

To understand further students' level of media literacy, participants completed the Media Literacy Test. The first section of the test contained five multiple-choice questions. These questions focused on concepts such as media, advertising, target audience, and stereotypes. This section of the Media Literacy Test was scored out of 20, with participants receiving a point for each correct response. Incorrectly circled items for questions 1, 2, and 3 received a 1-point deduction.

The second section of the test had participants view two commercials, one for financial planning and the other for a toy. To score the results for this portion of the test, points were allocated for each correct response for a total score of 48. For each commercial: 1 point was given for identifying the product; 6 points were given for describing the target audience using a range of descriptors including gender, age, race, job/role, and interests; 10 points were given for listing a range of persuasion and production techniques; 1 point was given for identifying the main message; 4 points were given for stating the hidden messages; and 2 points were given for describing stereotypes. The test was graded by a team of four scorers who worked in the same room. The scorers included the researcher and three other scorers that were not directly involved in the research. Each scorer had a scoring sheet with sample answers. Judgments about the test answers were based upon a deductive approach. According to Johnson and Christensen (2004), the process of scoring data is a rational process that requires judgment of the test content. The answers were examined to see if they represented the sample answer.
If they did, then they were allocated the appropriate number of points; however, if the answer was missing information or included irrelevant items, then the answers were not granted points. Any question regarding a student response was discussed by the team members to build consensus. Judgments were based upon whether the answer adequately represented the sample answer. Once all tests were graded, they were reviewed collectively by all scorers to establish reliability.

The scores from the multiple-choice and short answer sections were summed to calculate a score. The highest possible score was 68. To determine if there was a statistically significant change in the Media Literacy Test scores among the groups of participants between the pretest and the posttest, a factorial analysis of variance was performed using a split plot design (Best & Kahn, 2006; Garson, 2007).

A one-way ANOVA was then performed on the pretest and posttest Media Literacy Test scores to determine the difference among the groups. A one-way ANOVA is used to compare two or more group means to determine if they are statistically significant (Best & Kahn, 2006). The Bonferroni post hoc test was then run to measure differences between the groups' Media Literacy Test scores (Becker, 2000; Brace, Kemp, & Snelgar, 2006).

The score from the Media Literacy Test was also used to rank participants as having high, medium, or low level of media literacy. A high level of media literacy was a score of 47-68. A medium level of media literacy was a score of 23-46. And a low media literacy level was a score of 0-22. As previously mentioned, the level of media literacy ranking was correlated with the level of
exposure to media ranking and level of exposure to advertising ranking derived from the Exposure to Media Survey, using a Spearman rank order coefficient of correlation test.

Aside from analyzing the change in the overall Media Literacy Test scores, the data from the test were also used to gain an understanding of participants' existing knowledge about the purpose of advertising, target audience, selling techniques, social values, and stereotypes. In many cases a crosstab generated using SPSS software was used to summarize descriptive statistics including frequency counts and percentages. This method of analysis was considered appropriate based on the belief that descriptive statistics present information to allow a researcher to describe the characteristics of a treatment group (Creswell, 2002; Johnson & Christensen, 2004). For some questions, the data were recoded to compare the number of forms of advertising, attributes of target audience, selling techniques, social values, and stereotypes to the treatment group. A Chi-square test was then used to determine if there was a significant difference amongst the groups. This test was deemed appropriate because it is suited to measuring the association between two categorical variables (Creswell, 2002; Johnson & Christensen, 2004).

*Analyzing the Student Assignments*

The Student Assignments included the worksheets completed by participants as part of their media literacy activities as well as the Parental Restrictions Worksheet and Television Viewing Behaviour Worksheet. The answers on the Student Assignment Worksheets were reviewed by the researcher
and classroom teacher as a way to determine students' understandings of the concepts taught.

The answers on the Parental Restrictions Worksheet were coded using seven categories. Forbidden-based restrictions prohibited access to media. Content-based restrictions limited access to media because of coarse language, violence, or sex. Permission-based restrictions limited access to media based on parental permission. Software-based restrictions used a program to monitor or limit access to media. Time-based restrictions limited the amount of time spent consuming media. Work-based restrictions limited access to media after homework or chores. And family-based restrictions limited communication using media to friends or family members. A crosstab was generated to summarize the frequency counts and percentages of participants that listed particular restrictions, which is a suitable method for presenting descriptive statistics (Creswell, 2002; Johnson & Christensen, 2004).

The answers on the Television Viewing Behaviour Worksheet were analyzed to gain an understanding of the types and amount of commercials participants were viewing. On the worksheet, participants listed their three favourite shows, including the station, day, and time for each show. Each show was categorized by type including soap, drama, talk show, children cartoon, news, sports, documentary, music, reality, animated comedy, or comedy. A crosstab was generated to summarize the frequency counts and percentages of participants that listed particular show types, stations, or viewing times. This method of analysis
was deemed appropriate because a crosstab is a suitable method for presenting
descriptive statistics (Creswell, 2002; Johnson & Christensen, 2004).

The Television Viewing Behaviour Worksheet also included a question
about access to recording devices. Participants stated if they owned a recordable
device and whether they viewed commercials if they watched a recorded
television show. These data were categorized into three types: no recording
device, recording device and watch commercials, and recording device and
fast-forward commercials. Descriptive statistics were obtained from crosstabs
generated using SPSS software. Statistics included frequency counts and
percentages of participants that used recording devices. This method of analysis
was deemed appropriate because according to Creswell (2002), descriptive
statistics can be used to present information about participants' responses to
questions. The data were then recoded using SPSS software to "yes" or "no" to
indicate ownership of a recording device. A Spearman rank order coefficient of
correlation test was then used to measure the degree of relationship between the
level of exposure to advertising and owning a recording device. This type of test
was deemed appropriate because it is suited to correlating ordinal data (Best &
Kahn, 2006).

Analyzing the Reflective Journal

The Reflective Journal was completed by the researcher and used to study
the implications of media literacy instruction for teachers. This collection of
qualitative data was analyzed by separating the information into common themes.
According to Johnson and Christensen (2004), the first step in analyzing
qualitative data is to segment it into meaningful units. In the case of the Reflective Journal, each entry was already in segments, because each one was about a particular media literacy assignment and therefore they were already divided into topics such as purpose, main message, target audience, persuasion tactics, social values, stereotypes, production tactics, filming, and video editing. Since the entries were already divided by topic, it was easy to further segment the entries into two types, which included analytic activities and production activities.

The next step was to code the data. According to Johnson and Christensen (2004), this process can be done by marking the data with symbols, descriptive words, or category names. Since each journal entry was digital, the highlighter tool in MS Word was used to color code the data into chunks. Data were coded by obstacle type. In addition, for each obstacle, teaching strategies that were found to be effective were coded as a subgroup. Later each colored chunk of data was grouped together in a separate document for analysis.

Analyzing the Interview

The written transcripts for the Interview were read to notice common themes that related to difficulties and effective teaching strategies. A similar method of analysis was used for the Reflective Journal was used on the Interview transcripts. Data were already divided into segments based on question type. Each segment was then coded based on the obstacle type and teaching strategy. The coded data were then sorted by copying the coded quote and pasting it into a separate document about the category. Each document was then analyzed to gain a deeper understanding of teaching media literacy skills.
Methodological Assumptions

The methodological assumptions made in this research project were that participants had used a computer before and were familiar with basic mouse skills and standard operating tasks.

Limitations

This study has limitations that restrict the ability to generalize the findings to all students. The participants in this research were selected from private Christian schools. These students often have a high socioeconomic status, as many come from families that can afford to pay for their education. Moreover, all of the participants belong to families where Christian values are emphasized. In some cases, the students may be limited to the exposure they have to media, as many parents in this community restrict and monitor television viewing.

Another limitation to the study is that it measures the change in knowledge, attitudes, and behaviours towards only commercials. This confines the findings to this form of media. Although, there are numerous types of advertising such as billboards, magazine ads, radio announcements, electronic mailouts, and Internet pop-up ads, this study does not measure critical viewing of these forms. Moreover, it also does not investigate other kinds of mass media such as newspapers, magazines, radio, the Internet, video games, or television programs.

An additional limitation is the duration of each class period. Although an effort was made to maintain consistency amongst the groups, each school had class periods that varied in length. This meant that students in the Control group,
Analysis group, and Production group all received 360 minutes of instruction. However, this was allocated over a different number of class periods. For example, the Control group received 12 class periods of 30 minutes of instruction; the Analysis group received 8 class periods of 45 minutes of instruction; and the Production group received 9 class periods of 40 minutes of instruction.

In addition, due to the nature of the media literacy activities, students in the Analysis and Production group received 80 minutes more of instruction than the other three treatment groups. During the course of the study, participants in the Analysis and Production group received 11 class periods of 40 minutes of instruction. The increase in instructional time was necessary to adequately teach the content. To be able to compare the results of participants in the Analysis and Production group to participants in the Analysis group and the Production group, the content of instruction was kept the same; only the timing was adjusted. For example, participants in the Analysis and Production group completed the same analysis activities as the Analysis group. They viewed the same commercials and analyzed them to notice the purpose of advertising, target audience, selling techniques, social values, and stereotypes. Although the content of the activities was the same, less time was spent discussing each topic than the Analysis group. This was done to accommodate the production activities, which were also the same as the Production group. Participants applied their learning from the analytic activities to produce their own commercial. They learned how to operate a camera and use software to edit video footage. Although, the content of the activities was
the same, less time was spent editing the footage to produce a commercial than participants had in the Production group.

Ethical Considerations

Careful attention was given to protecting the rights of participants. In this study, ethical considerations were given to the issue of informed consent, participation withdrawal, confidentiality, anonymity, and suitability for an education setting.

Informed Consent

Consent is the participant’s agreement that he or she will partake in the research. In the case of this study, consent was obtained from the principal, teacher, parents, and students. Each participant was asked to sign an Informed Consent Form to acknowledge they understood the purpose of the research, procedures, and recognized their role in the study.

Participant Withdrawal

Participation in the research was optional. The participants were notified on the consent form about the right to withdraw. Before beginning the study, the participants were informed of this right. If a participant chose to withdraw, his or her data were destroyed.

Confidentiality and Anonymity

The issue of confidentiality and anonymity is an important part of ethical research. Several steps were taken to protect the privacy and rights of the participants. These included safe storage of data, coding of instruments, and the use of pseudonyms.
Appropriate for an Education Setting

Participants in the study were from private Christian schools. Each school is a community consisting of students, teachers, administration, and parents that hold Christian values. There is a desire within this community to have children be discerning. Parents and educators want students to be able to use good judgment when viewing media. Although this is an instructional goal within this study, the selection of commercials was of concern to members within the community. For example, they did not want alcohol or smoking advertisements. Moreover, they did not want the students to view any commercial that portrayed people as sex objects or made sexual innuendoes. These guidelines were followed during the course of the study.

Restatement of the Problem Area

In this study, various methods of media literacy instruction including analytic activities, production activities, and a combination of analytic and production activities were compared to determine their influence on grade 8 students’ knowledge, attitudes, and behaviours towards commercials. Participants were divided into four treatment groups that received different forms of instruction. Afterwards, a comparison analysis was used to reveal the activities that best address media literacy skills. Building on the research conducted by Kubey and Serafin (2001), this study used a wide range of instrumentation to measure the change in students' knowledge, attitudes, and behaviours towards commercials as well as qualitative data that provide a deeper understanding of teaching media literacy skills.
CHAPTER FOUR: PRESENTATION OF RESULTS

Children at an early age are targeted by companies that breed in them a desire for items and knowledge of brand names through advertising (OECD, 1982). Much of their consumption of advertising comes from commercials (Ontario Ministry of Education, 1989; Statistics Canada, 2004, 2006). Media literacy skills are considered essential to ensure that viewers are not manipulated by media messages (Adams & Hamm, 2000; Learmont, 2003; Lloyd-Kolkin & Tyner, 1991; Race, 2003; Schiebe & Rogow, 2004; Summers, 1997). For this reason, educators are teaching students media literacy skills in hopes that this will reduce the influence of advertisers. However, Tyner (2003) argues that there is a need for research that provides evidence that the time engaged in media education enhances educational opportunities for students. The purpose of this study was to compare the influence various forms of media literacy instruction has on students' level of media literacy. The question investigated here was, "What forms of media literacy instruction are most effective in changing students' knowledge, attitudes, and behaviours towards commercials?" The results of the study have been organized under three headings. These include Access to Media and Advertising, Instruction Improves Media Literacy, and Effective Teaching Strategies That Overcome Obstacles.

Access to Media and Advertising

Several instruments were used to control for variables that could influence students' access to media and advertising, thus affecting the level of media literacy. These instruments included the Exposure to Media Survey, Parental
Restrictions Worksheet, and Television Viewing Behaviour Worksheet. The variables examined included exposure to media, exposure to advertising, parental restrictions, and television viewing behaviour.

**Exposure to Media**

In the study, the possibility that exposure to media could influence media literacy skills was examined. Part 1 of the Exposure to Media Survey was used to determine the number of devices and their location within the home in order to calculate an exposure to media score. To score this survey, 1 point was allocated for each media device in the home, with 2 points given for each item in a bedroom. Based on the score, participants were ranked as having a high, medium, or low level of exposure to media.

Descriptive data from the Exposure to Media Survey were obtained using crosstabs. Findings showed all four groups had a similar level of exposure to media, with the majority of participants (81%) ranking at a medium level of exposure. The exposure to media ranking was correlated to the level of media literacy ranking derived from the scores on the Media Literacy Scale and Media Literacy Test. A Spearman rank order coefficient of correlation test was used to determine whether students who have a high exposure to media also have a high media literacy level. This test was deemed appropriate because it measures the degree of relationship between two sets of variables and is suited to ordinal data (Best & Kahn, 2006). Findings showed that there was no correlation between media literacy level and exposure to media on both the Media Literacy Scale ($r_s =$
.007, $N = 90$, $p = .473$, one-tailed) and Media Literacy Test ($r_s = -.22$, $N = 89$, $p = .420$, one-tailed).

Descriptive data from the Exposure to Media Survey were obtained using crosstabs to analyze participants' access to media devices. Findings showed every participant had a television, with the majority of homes (88%) having two or more. One fifth of the participants were found to have televisions in their bedrooms, and almost as many had computers with Internet access. Refer to Table 1 for an overview of the number and location of media devices in students' homes.

*Exposure to Advertising*

In the study, the possibility that exposure to advertising could influence media literacy skills was also examined. Part 2 of the Exposure to Advertising survey was used to determine, on a typical weekday, the amount of advertising that students view related to the activities they do outside of school. To calculate an exposure to advertising score, participants indicated the time they spent on a typical weekday completing activities. Some of the activities, including watching television, surfing the Internet, listening to the radio, reading magazines, or participating in a sport or club, contained large amounts of advertising. The time for these items was summed together to calculate a score. Based on the score, participants were ranked as having a high, medium, or low level of exposure to advertising.

Descriptive data from the Exposure to Media Survey were obtained using crosstabs. Findings showed the groups had a similar level of exposure to advertising, with the majority of participants (44%) ranking as a medium level of
### Table 1

**Participants With Media Devices and Their Location in the Home**

<table>
<thead>
<tr>
<th>Media Device</th>
<th>Control 2+ Home (%)</th>
<th>Control Bedroom (%)</th>
<th>Analysis 2+ Home (%)</th>
<th>Analysis Bedroom (%)</th>
<th>Production 2+ Home (%)</th>
<th>Production Bedroom (%)</th>
<th>A &amp; P 2+ Home (%)</th>
<th>A &amp; P Bedroom (%)</th>
<th>Total 2+ Home (%)</th>
<th>Total Bedroom (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>74</td>
<td>13</td>
<td>95</td>
<td>33</td>
<td>91</td>
<td>30</td>
<td>92</td>
<td>4</td>
<td>88</td>
<td>20</td>
</tr>
<tr>
<td>VCR</td>
<td>30</td>
<td>0</td>
<td>57</td>
<td>14</td>
<td>61</td>
<td>17</td>
<td>46</td>
<td>4</td>
<td>49</td>
<td>9</td>
</tr>
<tr>
<td>DVD player</td>
<td>52</td>
<td>13</td>
<td>76</td>
<td>24</td>
<td>65</td>
<td>17</td>
<td>75</td>
<td>13</td>
<td>67</td>
<td>17</td>
</tr>
<tr>
<td>Comp with int.</td>
<td>26</td>
<td>0</td>
<td>48</td>
<td>5</td>
<td>61</td>
<td>39</td>
<td>63</td>
<td>33</td>
<td>50</td>
<td>19</td>
</tr>
<tr>
<td>Comp no int.</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>13</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Video system</td>
<td>61</td>
<td>30</td>
<td>81</td>
<td>38</td>
<td>65</td>
<td>48</td>
<td>58</td>
<td>42</td>
<td>66</td>
<td>40</td>
</tr>
<tr>
<td>Radio</td>
<td>96</td>
<td>91</td>
<td>100</td>
<td>95</td>
<td>96</td>
<td>87</td>
<td>100</td>
<td>88</td>
<td>98</td>
<td>90</td>
</tr>
<tr>
<td>CD / MP3</td>
<td>100</td>
<td>96</td>
<td>100</td>
<td>95</td>
<td>91</td>
<td>96</td>
<td>100</td>
<td>96</td>
<td>98</td>
<td>96</td>
</tr>
<tr>
<td>Phone / cell</td>
<td>100</td>
<td>30</td>
<td>95</td>
<td>38</td>
<td>100</td>
<td>52</td>
<td>100</td>
<td>13</td>
<td>99</td>
<td>33</td>
</tr>
</tbody>
</table>

| N                | 23                   | 23                  | 21                    | 21                   | 23                     | 23                     | 24                | 24                | 91                | 91                |

*Note. Frequency counts have been converted into percentages. A& P = Analysis and Production group.*
exposure. The exposure to advertising ranking was correlated to the level of media literacy ranking derived from the scores on the Media Literacy Scale and Media Literacy Test. A Spearman rank order coefficient of correlation was used to determine if students who have a high exposure to advertising also have a high media literacy level. This type of test was deemed to be appropriate because it measures the degree of relationship between two sets of variables and is suited to ordinal data (Best & Kahn, 2006). Findings revealed there was no significant correlation between exposure to advertising and media literacy on both the Media Literacy Scale ($r_s = .020, N = 90, p = .424, \text{one-tailed}$) and Media Literacy Test ($r_s = .008, N = 89, p = .470, \text{one-tailed}$).

Descriptive data from the Exposure to Media Survey were obtained using crosstabs to analyze participants' media consumption habits on a typical weekday. Findings showed the majority of advertisements come from watching television, with 58% of participants reporting participating in this activity for 2 hours or more on a typical weekday. Refer to Table 2 for an overview of how students spend their time on a typical weekday.

On Part 2 of the Exposure to Media Survey, participants indicated if they multitasked while doing an activity. If they did multitask, then participants described the other activity. It was observed that students were most likely to simultaneously chat on the computer, surf the Internet, listen to music, and watch television. The number of activities in which participants multitasked was then summed. Based on these data, participants' behaviours were categorized as no multitasking, multitask on 1-2 activities, multitask on 3-4 activities, and multitask
**Table 2**

*Participants that Spend 2+ Hours Doing an Activity*

<table>
<thead>
<tr>
<th></th>
<th>Control (%)</th>
<th>Analysis (%)</th>
<th>Production (%)</th>
<th>A &amp; P (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advertising</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watch television</td>
<td>61</td>
<td>67</td>
<td>61</td>
<td>46</td>
<td>58</td>
</tr>
<tr>
<td>Surf the internet</td>
<td>9</td>
<td>14</td>
<td>39</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>Listen to the radio</td>
<td>13</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Email</td>
<td>0</td>
<td>5</td>
<td>13</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Read magazines</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sport or club</td>
<td>30</td>
<td>57</td>
<td>39</td>
<td>50</td>
<td>44</td>
</tr>
<tr>
<td><strong>Non-Advertising</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watch movies</td>
<td>30</td>
<td>24</td>
<td>26</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Play video games</td>
<td>9</td>
<td>19</td>
<td>52</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>CDs or music files</td>
<td>26</td>
<td>24</td>
<td>39</td>
<td>33</td>
<td>31</td>
</tr>
<tr>
<td>Talk on the phone</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Chat computer</td>
<td>9</td>
<td>24</td>
<td>43</td>
<td>42</td>
<td>30</td>
</tr>
<tr>
<td>Read books</td>
<td>17</td>
<td>29</td>
<td>4</td>
<td>17</td>
<td>16</td>
</tr>
</tbody>
</table>

| N                    | 23          | 21           | 23             | 24        | 91        |

*Note.* Frequency counts have been converted into percentages. A& P = Analysis and Production group.
on 5+ activities. A Spearman rank order coefficient of correlation test was used to measure the degree of relationship between the level of exposure to advertising ranking and the multitasking behaviour ranking. This type of test was considered appropriate because it is suited to correlating two sets of ordinal data (Best & Kahn, 2006). Findings showed a significant positive correlation between the level of exposure to advertising and multitasking behaviour \( (r_s = .391, N = 91, p < .0005, \text{one-tailed}) \). Students who multitask have a significantly higher exposure level to advertising than those students that do not multitask.

Today, recording devices can be used to prerecord a television program. This gives viewers the capability to fast-forward through commercials to avoid watching the advertisements aired between the shows. To understand if recording devices influenced students' exposure to advertising, participants completed a Television Viewing Behaviour Worksheet. On the worksheet, they indicated if they had a recording device in the home and, if they selected "yes," whether they watched commercials when viewing a prerecorded show or if they fast-forwarded over commercials when viewing a prerecorded show. Descriptive statistics from the Television Viewing Behaviour Worksheet were obtained from a crosstab. The findings showed that 44% of students had this technology available in their homes. When students did prerecord shows, 78% choose not to view the advertisements; however, 23% stated that they stopped fast-forwarding recordings to view advertisements they enjoyed. A Spearman rank order coefficient of correlation test was used to measure the degree of relationship between the level of exposure to advertising ranking and ownership of a recording device. This type
of test is deemed appropriate because it is suited to correlating two sets of ordinal data (Best & Kahn, 2006). Findings showed that there was no significant correlation between the level of exposure to advertising and having a recording device and the exposure to advertising \((r_s = .52, N = 89, p = .315, \text{one-tailed})\). Students who had a recording device did not have a higher exposure level to advertising than those students that did not have a recording device.

**Parental Restrictions**

In the study, the possibility that parental restrictions could influence access to advertising was examined. The Parental Restriction Worksheet was used to determine the limitations that parents place upon activities their children complete in their spare time, including watching television, watching movies, surfing the Internet, playing video games, listening to the radio, listening to CDs or Music Files, talking on the phone, chatting using the computer, emailing using the computer, reading magazines, and reading books. For each activity, participants indicated whether parents restrict their behaviours and described the restriction. These answers were then coded using seven categories: forbidden-based restrictions, content-based restrictions, permission-based restrictions, software-based restrictions, time-based restrictions, work-based restrictions, and family-based restrictions. Forbidden-based restrictions prohibited access to media. Content-based restrictions limited access to media because of coarse language, violence, or sex. Permission-based restrictions limited access to media based on parental permission. Software-based restrictions used a program to monitor or limit access to media. Time-based restrictions limited the amount of time spent
consuming media. Work-based restrictions limited access to media after homework or chores. And family-based restrictions limited communication using media to friends or family members.

Using a crosstab to calculate descriptive statistics, the results from the Parental Restrictions Worksheet identified that the most common parental restrictions placed upon students' consumption of media are requiring permission, prohibiting certain content, imposing time limits, and insisting homework or chores are completed before watching television. Despite the availability of technology, very few participants stated software being used to monitor or restrict access to media such as Internet websites (4%) or television programs (0%). The findings showed that very few parents restricted television viewing, with a small number limiting access to programs based on content (34%), requiring parental permission before watching (5%), placing time limits on the activity (15%), or forbidding the activity (1%).

Television Viewing Behaviour

In the study, the possibility that television viewing behaviour could influence access to advertising was examined. Some stations on television, such as public broadcasting, do not air commercials, which limits the viewers' exposure to advertising dramatically. To understand students' consumption of television programs, participants completed a Television Viewing Behaviour Worksheet. On the worksheet, they listed their three favourite television shows, including the station, day, and time for each show. The shows were then categorized by type,
with each coded as soap, drama, talk show, children cartoon, news, sports, documentary, music, reality, animated comedy, or comedy.

Using a crosstab to calculate descriptive statistics from the Television Viewing Behaviour Worksheet, the findings identified that the majority of students watched comedy (27%), drama (23%), reality (19%), and animated comedy (19%) television programs. These shows were commonly watched during prime time, between 8:00 p.m. and 10:00 p.m. (62%). Most students viewed their favourite shows on stations that had commercials, with only 10% watching channels that restrict advertisements to shows played on the station. The findings indicate that students are exposed to commercials intended for a mature audience, based on the type of shows and channels they prefer to watch.

Instruction Improves Media Literacy

In the study, several instruments were used to measure media literacy, with a focus upon the change in knowledge, attitudes, and behaviours of students after media literacy instruction. The Media Literacy Test and Media Literacy Rating Scale were completed before and after media literacy instruction. These instruments were used to determine the change in media literacy.

The Media Literacy Test included two parts. In the first part, students answered a series of multiple-choice questions about media, advertising, target audience, and stereotypes. In the second part, students applied their knowledge to analyze two commercials to identify the product, target audience, selling techniques, message, social values, and stereotypes. The scores from each part of the test were summed together to derive a Media Literacy Test score.
A 4 (condition) x 2 (time) factorial analysis of variance was performed to examine participants' performance on the Media Literacy Test. This statistical test compared participants' test scores on the pretest and the posttest across the four conditions (Analysis, Production, Analysis and Production, Control). Participants' means and standard deviations scores from the Media Literacy Test are presented in Table 3. When the difference between the test scores was significant, partial Eta squared was used to measure the effect size. Effect size measures the magnitude of a treatment effect. The role of this measurement is to tell how big an effect can be expected from a treatment or the size of the difference between groups (Becker, 2000; Brace et al., 2006). According to Becker, when conducting factorial analysis of variance, partial Eta squared is an acceptable index of effect size.

For the Media Literacy Test scores there was a significant main effect for time, $F(1, 83) = 92.99, p < .0005$, partial $\eta^2 = .528$, which means that there was a significant difference within the pretest and posttest scores achieved by each participant. The size of the difference was moderate based on the effect size. There was also a significant main effect for condition, $F(1, 83) = 7.988, p < .0005$, partial $\eta^2 = .224$, which means that there was a significant difference between the treatment groups. The size of the difference was small based on the effect size. As well, there was a significant interaction effect between the condition and time, $F(3, 83) = 15.366, p < .0005$, partial $\eta^2 = .357$, which means there was a significant difference between the treatment groups and their scores. The size of the difference was moderate based on the effect size.
Table 3

**Media Literacy Test Pre- and Posttest Scores**

<table>
<thead>
<tr>
<th></th>
<th>Media literacy test pretest scores</th>
<th>Media literacy test posttest scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Control group</td>
<td>23.83</td>
<td>4.366</td>
</tr>
<tr>
<td>Analysis group</td>
<td>22.79</td>
<td>4.289</td>
</tr>
<tr>
<td>Production group</td>
<td>23.05</td>
<td>5.766</td>
</tr>
<tr>
<td>Analysis &amp; production</td>
<td>25.13</td>
<td>7.091</td>
</tr>
<tr>
<td>Total</td>
<td>23.77</td>
<td>5.546</td>
</tr>
</tbody>
</table>

*Note. N = number of participants. SD = standard deviation. Maximum score = 68.*
A one-way ANOVA was performed on the pretest and posttest Media
Literacy Test scores to determine the difference between the groups. The
Bonferroni post hoc test was used to compare the Media Literacy Test posttest
scores for each treatment group. This is deemed an appropriate test because it is
recommended for comparing levels from between-subject factors (Becker, 2000;
Brace et al., 2006). In the pretest, no significant differences were found between
the groups, $F(3, 85) = .736, p = 1.000$. However, in the posttest, significant
differences were found between the Control group and the Analysis group, $F(3,
86) = 17.811, p = .004$, between the Control group and the Analysis and
Production group, $F(3, 86) = 17.81, p < .0005$, between the Production group
and the Analysis group $F(3, 86) = 17.811, p = .013$, and between the Production
group and the Analysis and Production group $F(3, 86) = 17.811, p < .0005$. There
was no significant difference between the Control group and the Production
group, $F(3, 86) = 17.811, p = 1$, or between the Analysis group and the Analysis
and Production group, $F(3, 86) = 17.811, p = .105$.

A $4 \times 2$ factorial analysis of variance was performed to
examine participants' performance on the Media Literacy Rating Scale. This
statistical test compared participants' test scores on the pretest and the posttest
across the four conditions (Analysis, Production, Analysis and Production,
Control). Participants' means and standard deviations scores from the Media
Literacy Rating Scale are presented in Table 4. For the test scores there was a
significant main effect for time, $F(1, 84) = 7.049, p < .009$, partial $\eta^2 = .077$, which means that there was a significant difference within the pretest and posttest
### Table 4

**Media Literacy Rating Scale Pre- and Posttest Scores**

<table>
<thead>
<tr>
<th></th>
<th>Media literacy rating scale pre-test scores</th>
<th>Media literacy rating scale posttest scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Control group</td>
<td>13.00</td>
<td>4.967</td>
</tr>
<tr>
<td>Analysis group</td>
<td>13.68</td>
<td>6.953</td>
</tr>
<tr>
<td>Production group</td>
<td>9.22</td>
<td>5.22</td>
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<tr>
<td>Analysis &amp; production</td>
<td>13.75</td>
<td>6.674</td>
</tr>
<tr>
<td>Total</td>
<td>12.36</td>
<td>6.185</td>
</tr>
</tbody>
</table>

*Note.* N = number of participants. SD = standard deviation. Maximum score = 42.
scores achieved by each participant. The effect size was small. However, there was no significant main effect for condition, $F(1, 84) = 2.417, p = .072$, which means that there was no significant difference between the treatment groups. As well, there was no significant interaction effect between the condition and time, $F(3, 84) = 1.401, p = .248$, which means there was no significant difference between the treatment groups and their scores.

*Knowledge of Commercials*

Several instruments were used to measure the knowledge that students have about commercials including questions from the Media Literacy Rating Scale and Media Literacy Test. The research results about knowledge have been divided into six parts. The parts are purpose of advertising, product identification and the main message, target audience, selling techniques, social values, and stereotypes.

*Purpose of advertising.* Knowledge about the purpose of advertising was measured using question 2 on Part 1 of the Media Literacy Test and statements 15 and 18 on the Media Literacy Rating Scale. Using a crosstab, descriptive statistics were obtained for each question. The research findings show students already know a lot about advertising. Students understand that commercials are designed for profit. In the study, at the pretest, 93% of respondents agreed (51%) or strongly agreed (42%) with the statement, "Commercials are used to help make a company money." Refer to Table 5 for an overview of the results for this statement.
### Table 5

**Comparison of the Change in Knowledge, Attitudes, and Behaviours**

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th></th>
<th></th>
<th></th>
<th>Post</th>
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<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Analysis</td>
<td>Production</td>
<td>A &amp; P</td>
<td>Control</td>
<td>Analysis</td>
<td>Production</td>
<td>A &amp; P</td>
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<td>Purpose</td>
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<td>95</td>
<td>87</td>
<td>92</td>
<td>96</td>
<td>100</td>
<td>91</td>
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<td>70</td>
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<td>40</td>
<td>30</td>
<td>57</td>
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<td>68</td>
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<tr>
<td>Selling tech.</td>
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<td>29</td>
<td>62</td>
<td>44</td>
<td>22</td>
<td>57</td>
<td>57</td>
<td>76</td>
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<td>Social values</td>
<td>17</td>
<td>14</td>
<td>14</td>
<td>32</td>
<td>43</td>
<td>86</td>
<td>22</td>
<td>96</td>
</tr>
<tr>
<td>Stereotypes</td>
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<td>19</td>
<td>5</td>
<td>4</td>
<td>26</td>
<td>48</td>
<td>13</td>
<td>76</td>
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<td><strong>Knowledge</strong></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Skepticism</td>
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<td>90</td>
<td>96</td>
<td>96</td>
<td>87</td>
<td>84</td>
<td>81</td>
<td>83</td>
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<tr>
<td>Materialism</td>
<td>28</td>
<td>19</td>
<td>48</td>
<td>38</td>
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<td>52</td>
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<td>Critical thinking</td>
<td>41</td>
<td>43</td>
<td>30</td>
<td>33</td>
<td>26</td>
<td>43</td>
<td>52</td>
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<td>Consumer habits</td>
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<td>29</td>
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<td><strong>Behaviour</strong></td>
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<td>23</td>
<td>25</td>
<td>23</td>
<td>21</td>
<td>21</td>
<td>25</td>
</tr>
</tbody>
</table>

*Note. A & P = Analysis and Production group.*
As well, they can recognize various forms of advertising in their environment. On Part 1 of the Media Literacy Test, 89% of participants in the pretest could correctly identify three or more types of advertising from a list of items. Students in the study knew that commercials, flyers, billboards, and radio announcements were types of advertising. However, many (28%) did not consider a logo on clothing as advertising. After instruction, this changed, with the majority of participants in both the Analysis (100%) and Analysis and Production (88%) groups correctly identifying a logo as a type of advertising in comparison to participants in the Production (74%) and Control (70%) groups. To measure the association between the ability to identify a logo and treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). The Chi-square test results show a significant difference between the groups, $X^2 = 8.861, N = 92, p = .031$.

However, despite understanding the purpose of commercials, very few students believed they were influenced by the media messages. At the time of the pretest, only 41% of respondents agreed (35.6%) or strongly agreed (5.6%) with the statement, "People are strongly influenced by the things they see in commercials." This did not change after media literacy instruction.

Product and main message. Knowledge about the product and main message was measured using questions 1, 4, 7, and 10 on Part 2 of the Media Literacy Test. Using a crosstab, descriptive statistics were obtained for each question. On this test, participants viewed two commercials and afterwards identified the product and message. The findings showed no instruction was
required for students to be able to have this ability. At the time of the pretest, 97% of participants were able to identify the product advertised in both a toy and a financial planning commercial. The majority of participants were also able to describe the main message in the financial planning commercial (91%) and toy commercial (84%). Refer to Table 5 for an overview of the participants that identified the main message in both commercials.

*Target audience.* Knowledge about target audience was measured using questions 3 and 4 on Part 1 and questions 2 and 8 on Part 2 of the Media Literacy Test and statement 16 on the Media Literacy Rating Scale. Using a crosstab, descriptive statistics were obtained for each question. The research findings showed students have a basic understanding of target audience. The majority of participants (85%) in the pretest could identify the correct definition of target audience on the Media Literacy Test. Aside from knowing the definition, students also recognize that advertisers make commercials to attract a targeted group of people. In the pretest, 50% agreed and 26% strongly agreed with the statement, "Commercials are made in a special way to get people of certain ages to watch them."

Moreover, students were also able to recognize that they are a target group. On the Media Literacy Test, 75% of participants could identify five or more items from a list of eight correct items that commercials try to sell to their age group, at the time of the pretest. They knew that cars (95%), dining room furniture (100%), homes (100%), and investments (99%) were products not targeted to people their age group. They also knew that video games (98%), pop
(85%), clothes (85%), potato chips (77%), and bubble gum (68%) were items targeted to people in their age group. However, they were less likely to recognize cereal (43%), board games (53%), or toys (55%) as items targeted to people in their age group.

Students had difficulty describing the attributes of a target audience after watching a commercial. In the pretest, most participants listed one attribute (44%) for the financial planning ad and two attributes (50%) for the toy ad. Very few respondents could list three or more attributes for the financial planning (7%) or toy commercial (24%).

The ability to describe target audience increased after media literacy instruction. In the posttest, in the financial planning ad, the majority of participants in the Analysis (43%) and Analysis and Production (48%) groups were able to list three or more attributes in comparison to participants in the Production (22%) and Control (0%) groups. To measure the association between the number of attributes listed in the financial planning commercial and treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). The Chi-square test results show a significant difference amongst the groups in the financial planning ad,

\[ x^2 = 16.554, N = 92, p = .001. \]

In the posttest, in the toy ad, the majority of participants in the Analysis (57%) and Analysis and Production (68%) groups were able to list three or more attributes in comparison to participants in the Production (39%) and Control (30%) groups. To measure the association between the attributes listed in the toy
ad and treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). The Chi-square test results show a significant difference amongst the groups in the toy ad, \( x^2 = 8.238, N = 92, p = .041 \). Refer to Table 5 for an overview of the number of respondents that listed three or more attributes in the toy commercial.

**Selling techniques.** Knowledge about selling techniques was measured using questions 3 and 9 on Part 2 of the Media Literacy Test and statements 19, 20, and 21 on the Media Literacy Rating Scale. Students already have some understanding of selling techniques. For example, findings showed the majority of participants in the study were able to recognize people in commercials as actors (76%) and that words are specially chosen to make a viewer want to purchase the item (84%). However, students were unable to identify speed as a selling technique. At the time of the pretest on the Media Literacy Rating Scale, only 37% of participants agreed or strongly agreed with the statement, "The action in commercials is so fast that the details are difficult to remember." On the posttest, more participants in the Analysis and Production group (68%) either agreed or strongly agreed with the statement than participants in the Production (48%), Analysis (43%), and Control (30%) groups. To measure the association between agreement that speed is a selling technique and treatment group, the data were recoded into agree or did not agree with the statement. Chi-square was then used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). The Chi-square test results did not show a significant difference amongst the groups, \( x^2 = 7.073, N = 92, p = .070 \).
Media literacy instruction was found to improve students' ability to list selling techniques after watching a commercial. On the pretest, participants listed fewer than three selling techniques on the financial planning (59%) and toy commercial (48%). On the financial planning commercial, after instruction, the majority of participants in the Analysis and Production group (76%) were able to list three or more selling techniques in comparison to participants in the Production (48%), Analysis (52%), and Control (30%) groups. To measure the association between the number of selling techniques listed and treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). The Chi-square test results show a significant difference amongst the groups, $x^2 = 10.218, N = 92, p = .017$.

On the toy commercial, after instruction, the majority of participants in the Analysis and Production group (76%) were also able to list three or more selling techniques in comparison to participants in the Production (57%), Analysis (57%), and Control (22%) groups. To measure the association between the number of selling techniques listed and treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). Chi-square test results show a significant difference amongst the groups, $x^2 = 14.598, N = 92, p = .002$. Refer to Table 5 for an overview of the number of participants that could list three or more selling techniques in the toy commercial.

*Social values.* Knowledge about social values was measured using questions 5 and 11 on Part 2 of the Media Literacy Test. Using a crosstab,
descriptive statistics were obtained for each question. The findings showed that students do not recognize hidden messages in commercials. At the time of the pretest, only 20% could identify social values such as wealth, happiness, family, or success in the financial planning commercial, and only 18% could identify social values such as popularity, fun, happiness, and being cool in the toy commercial.

On the financial planning commercial, after completing media literacy-based activities, the ability to recognize social values was much higher for participants in the Analysis and Analysis and Production groups than for participants in the Production and Control groups. At the time of the posttest, 86% of participants in the Analysis group could list one or more social values, and 96% of participants in the Analysis and Production group could list one or more social values. This contrasts with participants in the Production (22%) and Control (44%) groups, whereby few participants could list one or more social values. To measure the association between the number of social values listed in the financial planning commercial and the treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). Chi-square test results show a significant difference amongst the groups of participants that can list one or more social values in the financial planning commercial, $x^2 = 36.436, N = 92, p < .0005$. Refer to Table 5 for an overview of participants that could list one or more social values in the financial planning ad.
The increased ability to identify social values was also found in the toy commercial. At the time of the posttest, 76% of participants in the Analysis group could list one or more social values, and 84% of participants in the Analysis and Production group could list one or more social values. This contrasts with the Production (26%) and Control (26%) groups, whereby few participants could list one or more social values. To measure the association between the number of social values listed in the toy commercial and the treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). Chi-square test results show a significant difference amongst the groups of participants that can list one or more social values for the toy ad, $x^2 = 27.570$, $N = 92$, $p < .0005$.

**Stereotypes.** Knowledge about the stereotypes was measured using question 5 on Part 1 and questions 6 and 12 on Part 2 of the Media Literacy Test. Using a crosstab, descriptive statistics were obtained for each question. The findings showed that students have a limited understanding of stereotypes. At the time of the pretest, only 58% could correctly identify the definition of stereotype. After taking part in media literacy activities, students in the Analysis and Production (84%), Analysis (67%), and Production (74%) groups were able to better select the correct definition for stereotype from a list in comparison with participants in the Control (57%) group. To measure the association between the ability to identify the definition of stereotype and the treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002;
Johnson & Christensen, 2004). The Chi-square test results showed no significant difference amongst the groups of participants, $x^2 = 4.642, N = 92, p = .200$.

Students have difficulty noticing stereotypes in ads. At the time of the pretest only 11% of students were able to identify a stereotype in the financial planning ad, and only 22% were able to identify a stereotype in the toy ad. The findings show the ability to identify stereotypes does improve with instruction.

In the financial planning commercial, 76% of participants in the Analysis and Production group and 48% in the Analysis group could identify a stereotype. This contrasts with the Production (13%) and Control (26%) groups, where few participants identified stereotypes. To measure the association between the ability to identify stereotypes and the treatment group, Chi-square was used because it is suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). The Chi-square test results show a significant difference amongst the groups of participants in the financial planning ad, $x^2 = 26.890, N = 92, p < .0005$. Refer to Table 5 for an overview of the number of participants that could list a stereotype in the financial planning ad.

This was also seen in the toy commercial. Again, instruction made a difference, with 76% of participants in the Analysis and Production group and 76% of participants in the Analysis group now noticing stereotypes in the ad at the time of the posttest. These gains contrast with the participants in the Production (26%) and Control (43%) groups, where few participants identified a stereotype in the toy commercial. To measure the association between the ability to identify stereotypes and the treatment group, Chi-square was used because it is
suitable for comparing categorical data (Creswell, 2002; Johnson & Christensen, 2004). Chi-square test results show a significant difference amongst the groups of participants in the toy ad, $x^2 = 22.357, N = 92, p = .001$.

**Attitude Related to Commercials**

Several statements on the Media Literacy Rating Scale were used to measure students' attitude towards commercials. The research results have been organized under the headings skepticism and materialism.

**Skepticism.** Skepticism towards commercials was measured using statements 2, 4, 5, and 6 on the Media Literacy Rating Scale. Using a crosstab, descriptive statistics were obtained for each statement. The findings showed students possess healthy skepticism towards advertising. At the time of the pretest, the majority of respondents (91%) were skeptical about commercials. They indicated a strong agreement towards the following statements, "You can't believe everything you see in commercials," "I don't trust advertising very much," and "The products in commercials are exaggerated, compared to what you actually buy." They also indicated a strong disagreement to the statement, "I think what you see on commercials is true." This attitude did not strengthen after media literacy instruction. Refer to Table 5 for an overview of the number of participants that agreed with the statement, "You can't believe everything you see in commercials."

**Materialism.** Materialism was measured using statement 1 on the Media Literacy Rating Scale. Using a crosstab, descriptive statistics were obtained for the statement. The research findings showed that media literacy instruction did
not influence materialism. At the time of the pretest, students ranged in their opinion towards the statement, "I wish I had a lot of things I see in commercials," with a division amongst participants that agreed (33%) and disagreed (46%) with this statement. There was no change in this attitude after media literacy instruction. Refer to Table 5 for an overview of the participants that agreed with the statement.

*Behaviour Towards Commercials*

Several statements on the Media Literacy Rating Scale were used to measure students' behaviour towards commercials. The research results have been organized under the headings response to commercials, consumer behaviour, and critical thinking.

*Response to commercials.* The response to commercials was measured using statements 8 and 10 on the Media Literacy Rating Scale. Using a crosstab, descriptive statistics were obtained for each statement. The research findings showed that students enjoy commercials. Despite having the technology to avoid advertisements, students prefer not to use it. On the Media Literacy Rating Scale, the majority of students at the time of the pretest (72%) disagreed with the statement, "I mute the TV to not have to hear the commercials." In fact, many students turn them up. On the Media Literacy Rating Scale at the time of the pretest, 24% of students indicated agreement towards the statement, "I like commercials and will sometimes turn them up." Media literacy instruction was not found to change this behaviour.
Consumer behaviour. Consumer behaviour was measured using statement 9 on the Media Literacy Rating Scale. Using a crosstab, descriptive statistics were obtained for the statement. The research findings indicated that students do ask for items they see in commercials. At the time of the pretest, 24% of participants agreed with the statement, "I ask my parents to buy me things I see on commercials." This behaviour did not change after media literacy instruction. Refer to Table 5 for an overview of the number of participants that agreed with the statement.

Critical thinking. Critical thinking was measured using statement 11 on the Media Literacy Rating Scale. Using a crosstab, descriptive statistics were obtained for each statement. The research findings showed that media literacy instruction was found to increase critical thinking. On the Media Literacy Rating Scale at the time of the pretest, only 37% of participants either agreed (34%) or strongly agreed (2%) with the statement, "I think about the message a commercial is trying to make." However, after media literacy instruction, participants in the Analysis and Analysis and Production groups had strengthened their agreement. At the time of the posttest, 43% of participants in the Analysis group and 52% of participants in the Analysis and Production group indicated that they think about the message contained within an ad. This contrasts with the Production (26%) and Control (26%) groups, whereby few participants agreed with the statement. To measure the association between critical thinking and treatment group, the data were recoded into agree or did not agree with the statement. Chi-square was then used because it is suitable for comparing categorical data (Creswell, 2002;
Johnson & Christensen, 2004). Chi-square test results did not show a significant difference amongst the groups, $x^2 = 5.075$, $N = 92$, $p = .166$. Refer to Table 5 for an overview of the number of participants that agreed with the statement, "I think about the message a commercial is trying to make."

Effective Teaching Strategies That Overcome Obstacles

In the study, qualitative data from the Reflective Journal and Interview were analyzed to gain an understanding of the obstacles when teaching media literacy skills and effective strategies for solving the difficulties. Findings showed that obstacles differed depending on whether it was an analytic or production activity. When engaged in analytic activities, difficulties included locating suitable resources, addressing the competition from commercials, encouraging written reflection about commercials, recognizing social values contained in commercials, and discussing racial stereotypes. When engaged in production activities, the difficulties focused upon logistics such as positioning the video recording stations, managing co-operative group work, organizing ideas, filming the footage, computer issues, and scheduling time. The teaching strategies that were identified to overcome the challenges are discussed.

Locating Suitable Resources

In this study, locating suitable resources was identified as a challenge. When analyzing commercials, numerous samples were required to allow students to study topics including target audience, selling techniques, social values, and stereotypes. Often the need for additional commercials was required during the study to have students better understand a topic. After the lesson on social values,
the researcher commented on the need to locate additional commercials and the
concern about finding ones appropriate for a classroom setting: "This is going to
be difficult, because finding ads that can be downloaded and are appropriate for a
school setting presents some unique challenges."

In this study, the commercials were located on the Internet. There was a
need to find suitable commercials that could be downloaded, because this allowed
the commercial to be saved as a file that could be transferred to the computer.
This was necessary, because not all the sites had Internet access and students
needed to view the commercials repeatedly to complete the analytic activities.
Although locating suitable commercials was difficult, the benefit to instruction
was noted by one of the teachers taking part in the study: "Seeing the
commercials. I think that was probably a big thing because, but having them right
in front of the students as they're being aired, was very helpful." Using the
Internet to locate commercials was found to be an effective strategy.

*Addressing the Competition from Commercials*

During instruction, viewing commercials became an unexpected
classroom management problem. In this study, each student could watch the
commercial on their own computer. Although being able to watch the
commercials repeatedly was an advantage to noticing target audience, selling
techniques, social values, and stereotypes, it did become an obstacle to learning,
because the ads competed for students' attention.

At times, students became so involved in what they were doing on the
computer that they did not want to stop. However, there were points during class
time when the teacher needed to offer additional instructions or ask a question to engage the group in meaningful discussion. It was during this time when the commercial competed for the students' attention. As one teacher stated, "Technology gets in the way when you are not able to have everyone's attention because they are looking at or being distracted by what's on the screen in front of them." When student attention is diverted away from the teacher towards the computer, it can prevent students from learning.

Often students enjoyed watching commercials so much that they had difficulty remaining focused on the task. The researcher commented in a journal entry, "[It seems] some commercials are just fun to watch that students can't help but view the same ad over and over again, even if it is not the one we are discussing." The enjoyment students received from watching commercials became a source of competition for students' attention. This was noted in a journal entry: "My competition today was a boy holding two windshield wiper blades, making each talk in a high-pitched voice. Hmmm. Advertisers must know something I don't, because that ad was a big hit."

Several strategies were used during the study to focus students' attention. The most effective was having students turn off their computer screens when instructions were given or there was a group discussion. That way, students were forced to look away from the computer and shift their attention instead to the teacher.
Encouraging Written Reflection About Commercials

In this study, encouraging written reflection about commercials was identified as a challenge. During instruction students would discuss their ideas as a group, but they did not want to write about them. Simply put by one teacher, "They [students] would rather work on the computer than write," and by another, "They [students] want to talk about them [commercials], they don’t want to write about them."

Whenever, there was an oral discussion, students were actively involved and comments were insightful. In one journal entry the researcher commented on the quality of the oral discussion: "I have been noticing students bring their previous learning into the discussion. For example, they may mention the selling techniques or a method for targeting an audience. This is great news, as it tells me they are starting to think critically and they are remembering what they are learning." However, this quality of thinking could not be found in students' written reflections. Instead it was very difficult to get students to analyze commercials when they had to write their thoughts. The researcher commented on this challenge: "I have found that they [students] are reluctant to write full sentences, often use MSN short-forms, and can be very cryptic in their responses."

However, one teacher noted that the difficulty students had with expressing their ideas in written reflection was not limited to analysis of media. He stated, "[This problem] is cross-curricular. That isn't unique to this unit....Getting students to write down their inner feelings and thoughts, that is a
challenge. This is why we do journaling in language arts and in our devotions, is to get them to try and introspect on what they are feeling."

Several strategies were used during the study to encourage written reflection, with mixed results. One approach was to provide a sample answer to students to act as a guide when analyzing commercials. However, this tactic did not promote better quality writing. The researcher noted, "I gave the students a sample answer, and yet still the quality of much of the written work was poor."

Another strategy that was found to be more effective than the sample answer was grading student work. As one teacher commented in their interview, "We had to be creative and find a subject and an application where we could mark them and put that into the report card. And then when they [students] realized we were taking this seriously, then we got some much better quality."

*Recognizing Social Values in Commercials*

In this study, recognizing hidden messages in commercials was identified as a challenge during the analytic activities. Students struggled with recognizing social values in commercials. The researcher commented on this difficulty in a journal entry: "When I walked around the room I noticed a lot of 'I don't know' in the spot under what is hidden message. I also noticed that many students think that 'hidden message' means the small print instead of values such as beauty, success, riches, or popularity."

Teachers in the study believed this difficulty was developmental. This was documented in a journal entry: "I asked W why he thought students had struggled during the Hidden Message lesson a few weeks ago. He thought it was because
developmentally the children were not ready to deconstruct the subtle messages contained within advertisements." Another teacher commented that the ability to notice hidden messages was not limited to media messages; he stated, "Teaching hidden messages was definitely a challenge. But they [students] struggle with that in a poem, for example 'what is the theme?', 'what's the message and the symbolism in it? That is their age I think."

One strategy used to help students recognize social values was to show commercials targeting adolescents. It was hoped students would be able to deconstruct the hidden messages better if the commercials were designed for their age range. The researcher commented in a journal entry about the need to find these types of samples to analyze: "I am going to try to get some other commercials that are specifically for this age group. Perhaps it will help them to better understand hidden messages." This solution did seem to help students analyze the social values contained within commercials.

Discussing Racial Stereotypes in Commercials

In this study, discussing racial stereotypes in commercials was identified as a challenge during the analytic activities. This topic was observed to make students uncomfortable. In a journal entry the researcher wrote, "Gender stereotypes did not make the students uncomfortable, but our conversation about racial stereotypes did." It was observed that students seemed offended by the fact that visible minorities were excluded from commercials. In the same entry the researcher wrote, "You could tell the thought of television excluding people was offensive to them. One girl commented that she is not prejudiced and that ads did
not make her view people differently." This strong emotional response caused the researcher to question students' reaction to racial stereotypes. She reflected in the same entry: "Why does a conversation about racial stereotypes make people uncomfortable but not gender stereotypes? Why is students' reaction so much stronger when faced with racial prejudice but not gender inequality?"

One strategy used to help students feel more comfortable with discussing stereotypes was to use statistics. Students were shown the number of people living in the local area and the percentage of those people that were visible minorities. In the journal entry the researcher described the lesson: "I then showed students recent factual data from Stats Can. There are 5 million people in the G. 1.7 million are visible minorities." This fact was then used to frame the question, "If all the people that are visible minorities make money and spend it on products, why are advertisers making commercials to sell products that include mostly White characters but not characters from other races?" Students then analyzed commercials to notice the portrayal of visible minorities and how it perpetuates prejudice. This strategy seemed to be effective. The researcher commented on this approach: "I think [the lesson] gave students a better opportunity to think about stereotypes and how they are used by advertisers to promote products."

*Positioning the Video Recording Stations*

In this study, positioning the video recording stations was identified as a challenge during production activities. This is because there was not enough room for multiple production groups to film in the same space. This concern was commented upon in a journal entry about filming the commercial: "I am a little
concerned about doing all the filming in one room, especially after seeing the teams' ideas. Many want dialogue or require a large amount of space to film."

An effective strategy to overcome this challenge was to set up multiple video recording stations throughout the school. This gave each video production team their own space to set up backdrops, use props, and speak lines. At one site the library, hallway, and computer lab were used. At another site the library, classroom, and computer lab were used. The success of this strategy was commented upon in the interview: "I think we did a good job with getting the cameras all over the school. We were able to separate the students for filming. I know that was a big area of concern for me."

*Managing Co-operative Group Work*

In this study, managing co-operative group work was identified as a challenge during production activities. Video production is a co-operative task. It requires a high level of participation from each member. Unlike other activities, where a few can do the work while others sit and watch, video production requires a hundred percent effort from all team members. One teacher commented on this challenge: "I think anytime there is group work, that can be a problem because there is always going to be kids that are doing their own thing on the side."

Several strategies were used to manage group work. One solution was to create effective production teams. At one site the teacher proposed the idea of testing the production teams to see how students worked together before actually making the commercial. The researcher commented on this approach in a journal
entry: "I need to send an email to S asking her to create the groups for me. We want the groups to be the ones we intend to use when we create our commercial. That way we can test out each team to see if the members are a good fit. This will let us make any changes if necessary." At another site, the teacher wanted students to form their production teams by considering the type of characters they wanted in their commercial to target a specific audience. The teacher described this scenario: "I said, 'you can pick your own groups but remember what you are looking for as the target audience.' At first it was all boys with boys, girls with girls, and then the students reshuffled their own groups." Both methods of forming production teams were found to be effective. The success was commented upon by the teacher: "I think the kids worked well as groups."

Another strategy used to keep students focused during the co-operative portion of the production activities was to clearly define the activities that would be independent and those that would be co-operative before instruction began. In the study, students worked in teams when learning how to use the video production equipment to film various shots, movements, and angles. They also worked together to organize their commercial and record the footage. However, they did not work together to edit the final version of the commercial. Instead, after the video had been recorded, the groups disbanded and then each team member edited the content to produce their own unique version. One teacher commented about the combination of group and independent work used within the study: "It was the right way to handle it. That way each student was responsible for producing their own commercial from the raw footage."
Another strategy used to manage group work was conferencing with students during the planning and filming phases. It was observed during the storyboarding activity that some groups struggled to organize their ideas. In a journal entry the researcher commented on the difficulty of one group to reach consensus: "The debate began with the product. No one could reach consensus on the item to sell....Due to the lack of consensus, this group has not completed their storyboard," and on another group, "I sensed their enthusiasm for the task, but the conversation lacked purpose. Idea after idea was explored with no real commitment to anything." To help students organize their production, the researcher or teacher had a conference with each group. The researcher commented on this strategy: "This allowed me to conference with each team to work out details in their plan and discuss their needs regarding material and location." The success of the conferencing was commented on in a journal entry: "I had a conference with each group and felt confident they would be able to create their ads."

**Organizing Ideas for Making a Commercial**

In this study, organizing ideas for making a commercial was identified as a challenge when taking part in production activities. This is because students struggled with dividing action in the commercial into shots that were concise. The researcher commented on this difficulty in a journal entry about the introductory lesson for using video cameras to record shots: "I found that they [students] wanted to film a narrative by producing an entire commercial, instead of just one shot from one...I also noticed the shots they were filming were too lengthy, 10
seconds in duration. Since most commercials are in total 15 seconds long and the action needs to happen fast, teams needed to make their shots more concise."

Since organizing ideas into shots was observed to be a difficult concept, it became essential that during the planning of the commercial, students made effective use of their storyboard. A storyboard is an organizational tool that divides action into individual shots (see Appendix F). To help students organize their ideas into the storyboard, modeling was used. At each site, the researcher drew a replica of the storyboard on the blackboard and then, together as a group, students planned a sample commercial. This strategy was commented upon in a journal entry: "To ensure everyone understood how to complete the assignment, I started the lesson by modeling how to create a storyboard."

Despite having students use a storyboard to organize their idea, during filming many production teams continued to struggle with recording shots that were short and concise. It was observed that instead of producing 30-second commercials, students were creating productions far lengthier. As one teacher commented in the interview, "We need to really enforce to pick a simple product, that is small, and to keep it [the commercial] to 30 seconds." One idea proposed in the interview to help students organize their ideas was described by a teacher: "I think it would have been good to film one [commercial] together. Walk them [students] through an example video first....Now after that lesson, edit it, put it together, and then go to your groups." In the study, students filmed only individual shots, not an entire commercial, when learning how to use the camera.
However, the proposed modification to teaching video production may resolve the issue some production teams faced when organizing their ideas into shots.

*Filming the Footage*

In this study, filming the footage for the commercial was identified as a challenge. Filming a commercial is a fun activity. As the researcher commented in a journal entry, "I love filming! It is busy, but it is fun." However, despite the enjoyment, it is a production activity that poses several difficulties to teachers.

One difficulty was ensuring that students were adequately prepared for filming the footage. Since there was only one class period allocated, instructional time was limited. For this reason, there was concern about having all the necessary materials on hand when it was time to record the video. One method used to help students remember to bring in items for the filming class period was to have the classroom teacher post a reminder on the classroom whiteboard. "I had S record 'props for filming' on the homework board." In addition, a letter was sent home asking parents for their support in providing their son or daughter with any materials necessary for filming. An additional strategy used was to gain permission from the classroom teacher for students to wear street clothes on the day of the filming, since students wore uniforms. "I asked the classroom teacher if the students could change out of their uniforms into street clothes for filming. I did not want to waste instructional time. It was decided that the kids could change at first recess and return to the uniforms at lunch time."

These efforts proved to be successful, because all the groups at both sites were adequately prepared for their filming period. The researcher commented on
the preparedness of students: "I am pleased with the commitment students showed to the task. All groups brought in props for their commercial."

Despite the efforts made to ensure students were prepared for class and did not waste instruction time, there was still the pressure of not completing the filming in one class period. The anxiety about completing the filming in the time allocated was commented on in a journal entry: "At first I thought the teams would never be able to complete their filming. This was because they were taking so long to establish their sets and organize their shots." To help students manage instructional time during filming, the researcher used a time check strategy. Periodically during the class period, students would be notified about how much time they had left and what shot they should be filming. The researcher described this approach: "I kept a close eye on the time and let the teams know how much time they had left. This helped to keep everyone focused and moving along." This teaching strategy proved to be effective, because all groups completed their filming in the allocated amount of time.

Another difficulty faced during filming the footage was recording quality video. An effort was made to separate the production teams to different locations when filming. However, despite these efforts, sound quality was still poor. One teacher commented about this situation: "I found that it [filming] was busy, and it held back the sound quality." The researcher observed that production teams that wanted a voiceover had to mute the microphone and record the sound at another time: "We had to mute almost all of them [video cameras] and put sound in after, which created a time issue." One solution, not used in this study, might have been
to ask students to avoid producing commercials with voiceovers and instead use only text and background music.

*Resolving Computer Issues*

In this study, computer issues were identified as a challenge. As one teacher stated in the interview, "There is always technical problems." Sometimes, the difficulties experienced during the study were manageable, such as headsets having no sound, external devices not being detected, or a projector that would not work. At other times, the problems were more frustrating, such as computers freezing during the middle of video editing, while at still other times the challenges were so difficult they prevented teaching altogether, such as when the server crashed. One teacher summarized these issues in the interview: "Then we get to the issue of equipment issues, where we had computer freezes and crashes. And the program itself, well maybe it is our server, was not able to handle that much traffic. So it was a challenge."

In this study, one strategy used to limit difficulties was to contact the technical support person for each site prior to teaching the curriculum unit. He or she was informed about the activities that would take place in the computer lab. This person then helped to prepare the computers to ensure the necessary hardware and software were installed and working properly. The technical support person was appreciated. In the interview, the comment was made, "Your tech guy was great. Whatever you need, it is done."

However, despite having the support of the technical support person, it was noted during the study that it was important to plan ahead. This is because
often the technician could not resolve hardware or software problems right away. This often created anxiety, as there was concern that the equipment would not be ready for the next class. For example, at one site, there was an issue with installing cameras, and the solutions offered by email from the technician were not working. The anxiety caused by this situation was described in a journal entry: "The technician wrote me back and instructed me that the teacher had the administrative rights to install the camera software. S and I had no luck, and I will once again need to contact E for help. I am a little concerned, as we film on Monday!" Although, in the end, the technician was able to resolve the issue, computer issues continued to be a source of stress.

In addition, another strategy used in this study to avoid technical issues during a lesson was to test the hardware and software a week before teaching the lesson. Any problem areas were passed on to the technical support staff for them to resolve. It was found that sometimes the test of one computer did not replicate what would happen when multiple computers were doing the activity at the same time. For example, at one site, viewing a commercial using Windows Media Player was tested on one computer. However, when all the students tried to view the same commercial during the class period, the increased traffic caused the server to crash. This incident was described in a journal entry: "When the students tried to open the file Commercial 1, the computers froze. It turns out the file could be opened if there were a few viewers accessing it; however more than 20 turned out to be too much of a strain. The server crashed and network access was knocked out system-wide." This type of technical issue can be distressing. The
stress caused by this problem was described by the researcher: "Today I left the school with a headache. I have a love-hate relationship with technology, and today our relationship was on the rocks. Tylenol could not cure the crashed your server kind of pain I was feeling." This incident highlighted the need to test on multiple computers if an activity is server related.

Another strategy used for avoiding computer issues was to have students save their work often. When engaged in video production activities, there is an increased likelihood that hardware or software issues will occur. This is because video production places excessive memory demands on the computer, often causing it to freeze. To avoid students losing their work, they were frequently prompted to save. One teacher described his or her motto in the computer lab as "save, save often." With this practice in place, students lost very little of their work, even when the computer did freeze.

Time

In this study, time was identified as a challenge. As the researcher stated in one journal entry, "TIME, TIME, TIME, it is amazing how it rules my life and limits the possibilities." Teachers that took part in production activities wanted more time. One teacher commented in the interview that if they were to teach the activities again they would want more time: "I would like to have more time to get into some of the meat. I would spend more time on analyzing the commercials, more time on camerawork and on production of a commercial, and the storyboarding could be expanded." This statement reveals the desire for teachers to have more time to teach media literacy skills.
The limitation of time posed a challenge to teaching video production. One teacher expressed his concern with the content that had to be taught in one class period: "I think it was a lot of information that we tried to pack into a very short space. It had to be that way. That is the way the school is set up, with 45-minute class periods once a week." Teachers reluctantly accept that they need to teach a lot of information in a limited amount of time.

Often the pressure put on teachers to teach a lot of content in a short amount of time placed a pressure on students as well. This concern was expressed by the researcher, who reflected on the beginning of each class: "I think my opening statement was we got a lot to do today." The fact that there was so much to do each class raised some concern that the pace of instruction might put too much pressure on students. However, one teacher stated that he felt his students benefited from the pace. "I was proud of the kids. They responded. They came to the level that we set for them." Even if the students responded positively to the pace of the production activities, there was still always the pressure of time during the study.

Often, due to rotary, students would arrive to class late, which posed a problem because instructional time was so valuable. One method that proved to be an effective way to manage time was to schedule computer classes prior to breaks within the school day. For all the sites engaged in production activities, the computer class was before lunch or home time. This provided the option of taking an extra 5 minutes if necessary. This time made a difference in finishing a
discussion and completing a task. By extending the class into these time slots, it was a great way to get more time.

Summary

In summary, the research findings showed that students have a high level of exposure to advertising. However, the exposure to media messages is not correlated to media literacy, suggesting that consumption habits have nothing to do with the ability to think critically about media messages. Media literacy instruction was found to increase media literacy skills. In particular, participants in the Analysis and Analysis and Production groups made significantly higher gains in media literacy skills than those in the Production or Control groups. Participants that engaged in analytic or analytic and production activities were able to better define media-related terms, describe target audience, identify social values, and pinpoint stereotypes in commercials. As well, they were more likely to indicate they critically thought about the message in a commercial. Participants that engaged in analytic and production activities were able to better identify selling techniques than participants who engaged in only analytic or production activities. The research findings also revealed obstacles educators face when teaching media literacy and strategies they can use to overcome the challenges.
CHAPTER FIVE: SUMMARY OF FINDINGS

Children are socialized to become consumers at an early age. Much of this socialization occurs from media messages that cultivate a desire in children for the advertised item (OECD, 1982). By the time many students finish high school, they will have spent an average of 11,000 hours watching television (Ontario Ministry of Education, 1989), an activity that will have exposed them to more than 250,000 commercials. Each one of these ads uses proven selling techniques to target a specific group of people, to transform them from a viewer into a consumer (Lloyd-Kolkin & Tyner, 1991). Aside from the product information conveyed within the ad are social values and stereotypes that have the ability to shape individuals' view of the world when viewed repeatedly (Berger, 1999; Saegert & Young, 1983). To help children cope with commercial messages educators need to teach media literacy skills. It is thought that by doing so children will be less influenced by the content in commercials (Adams & Hamm, 2000; Learmont, 2003; Lloyd-Kolkin & Tyner; Race, 2003; Schiebe & Rogow, 2004; Summers, 1997). However there is a need for research that provides evidence that the time engaged in media education enhances educational opportunities for students (Tyner, 2003).

The purpose of this study was to compare the influence that forms of media literacy instruction have on students' knowledge, attitudes, and behaviours towards commercials to determine the activities that are most effective at developing media literacy skills. Specifically the question under investigation was, "What forms of media literacy instruction are most effective in changing
students' knowledge, attitudes, and behaviours towards commercials?" Using a mixed method design to collect both qualitative and quantitative data, the most effective activities to promote media literacy skills as well as the implications for teachers when incorporating media literacy activities into the curriculum were examined. To gain an understanding of the research, a summary of the study, discussion of the findings, and an examination of the implications of the results are examined.

The findings confirm the need for media literacy instruction. The data collected show that students have a high level of exposure to commercial messages based on the type and location of devices in the home, how they spend their leisure time, multitasking behaviour, reluctance to use technology to avoid ads, parental restrictions, and television viewing behaviour. Since it was found that exposure to media and advertising was not correlated to their media literacy score, there is a need to teach media literacy skills.

The findings show that media literacy instruction does improve media literacy skills. Specifically, those activities that include an analytic component or an analytic and production component are significantly better at increasing media literacy skills than are those activities that include only a production component. Based on the research findings, participants that engaged in analytic or both analytic and production activities were able to better define media-related terms, describe target audience, highlight hidden messages that include social values, and pinpoint stereotypes such as gender or race. As well, they were more likely to think critically about the content of a media message. It was also noted that
participants that engaged in analytic and production activities were better able to identify selling techniques than were participants who engaged only in analytic or production activities.

In addition, the research findings also identified the type of obstacles educators face when teaching media literacy skills. When engaged in analytic activities, the difficulties included locating suitable resources, addressing the competition for attention from commercials, encouraging quality written reflection, recognizing social values, and discussing racial stereotypes. However, when engaged in production activities the difficulties focused more on logistics related to making commercials such as positioning the video recording stations, managing co-operative group work, organizing ideas, filming the footage, computer issues, and scheduling time.

Discussion

In this section, the results are examined to understand not only the type of instruction that is most effective when teaching media literacy skills but also the implications of these findings for educators in the classroom. To start this examination, the level of exposure students have to media and advertising is explored. After an examination of media consumption habits, the type of media literacy instruction that is the most effective in changing knowledge, attitudes, and behaviours towards commercials is examined. This provides an understanding about what students know without media literacy instruction and the gains they make when they are trained to be critical of media messages. Later, the obstacles a teacher needs to overcome when engaging in media literacy activities and the
teaching strategies that educators can use when engaging in media literacy activities to overcome the obstacles are investigated, with connections made to the literature.

*The Level of Exposure to Media and Advertising*

The level of exposure students have to media and advertising is important because it provides insight into youth's consumption of media and advertising. By quantifying the level of exposure, it brings to the forefront the dire need to teach media literacy skills to students. In essence, the answer to the question regarding access to the media establishes the foundation needed to understand the importance of the research question, "What forms of media literacy instruction are most effective in changing students' knowledge, attitudes, and behaviours towards commercials?"

The research findings show students are exposed to large amounts of advertising each day. This is due to households having technology that make media highly accessible, such as television and the Internet. Every participant in the study lived in a household that had a television. According to department of Foreign Affairs and International Trade Canada, 99.2% of all Canadian homes have a television (Foreign Affairs and International Trade Canada, 1999). In this study, 88% of participants stated having two or more televisions, with one fifth having one in their bedroom. This is concerning, because during an average one-hour program, approximately 30 commercials are aired. With many students watching programs alone in their bedrooms, there is little social interaction or other distractions to prevent them from watching the ads.
Students are exposed to a large number of advertisements not only from the television but also from the Internet. Internet usage in Canada is increasing. Today, Statistics Canada reports that 7.9 million households use the Internet each day (Ellison, 2004). According to recent survey data on household spending, Internet use in Canadian households with children under 18 has risen substantially, from 50% in 1999 to 82% in 2004 (Statistics Canada, 2006). In the recent study, more than half of all participants had the Internet, with one fifth having access in their bedrooms. Advertisers recognize the growing use of this technology, and to expand their reach to consumers they are posting commercials onto websites. Often, these advertisements are disguised as videos, trailers, or movies to entice viewers to watch the ad (Hasbro, 2007). As well, many websites aimed at a youth-oriented audience will play advertisements that the viewer is forced to watch before they can see the desired content such as a music video (MuchMusic, 2007). With commercials crossing over to other technology besides the television set (Burrell, 2006), it creates a situation where today's youth are exposed to an increasing number of advertisements.

Technology is one reason that students are exposed to an overabundance of media messages; however, another is how they choose to spend their leisure time. In the study, students reported that the majority of their spare time on a typical weekday was spent watching television. Statistics Canada reports that the average adolescent between the ages of 12 and 17 watches 12.9 hours of television each week (Statistics Canada, 2004). In this study, the majority of students watched 2 or more hours of television each day. This is about 14 hours
each week, which is slightly higher than the Canadian average. In Canada, the
Canadian Radio-Television and Telecommunications Commission (CRTC), the
governing body that regulates television, limits advertising to 12 minutes per hour
(CRTC, 2006). In this time, approximately 24 thirty-second commercials can be aired. Based on the number of hours students reported watching television, this means that in one week they will have seen more than 300 commercials.

This number of advertisements excludes the exposure from other sources such as the Internet. Today's youth are watching less television and using the Internet more. According to Statistics Canada, teenagers are watching 3 hours less of television each week than their counterparts 5 years ago (Statistics Canada, 2006). In this study, a large majority of respondents reported spending an hour or more per day surfing the Internet. Many youth-oriented websites contain advertisements aimed at building brand awareness (MuchMusic, 2007). Often the marketing is integrated into the infrastructure of the site, which can include product information, games, e-cards, and videos. Blended throughout the site are commercials that are played as a splash page before entering the site, displayed on a mock television screen running in a separate pane, or accessible through a hyperlink. This is a sophisticated level of advertising, which transcends from its traditional form as a commercial on a television screen into a high-tech version. Bill Gates, an expert in the field of technology, predicts that this form of marketing to consumers will become more and more targeted as high-tech gadgetry becomes increasingly available (Burrell, 2006). With commercials
crossing over to any device with a screen, youth are constantly being subjected to advertising.

The argument could be made that technology is freeing the viewer from having to watch commercials. Today, recording devices allow viewers to prerecord programs and watch them later. This gives people the freedom to fast-forward through unwanted advertisements. Although this provides viewers with an opportunity to limit their exposure to advertising, for the most part this technology is not widespread. In this study, less than half of the participants had this technology. What is interesting is that despite having the capacity to fast-forward the ads, one fifth reported that they watched the commercials anyway. When asked why, participants stated they liked to watch commercials because they made them laugh. This finding is similar to those found in a Canadian report that identified the majority of people reported the best type of commercials are those which are entertaining (Avrim Lazar and Associates, Ltd, 1978). It appears that for many people advertisements are part of the entertainment when watching television.

Another reason students' exposure to advertising is so high is because they multitask. Today's teenagers do more than one thing at a time. The research shows that the activities that students are most likely to do simultaneously are chat on the computer, surf the Internet, listen to music, and watch television. Findings show that multitasking behaviour increases exposure to advertising, likely because the person is doing two or more activities at the same time that contain some form of advertisement. In this study, a significant correlation was found between exposure
to advertising and multitasking behaviour. It appears the more people multitask, the higher the exposure to advertising score.

Watching television is one of the main activities students do in their leisure time. Due to this situation, the majority of parents have some type of family rule that governs this activity. According to the U.S. Census Bureau, 72.6% of children between the ages of 12 and 17 have at least one rule regarding television viewing. The rules either prohibit a type of program, limit the number of hours spent watching, or restrict viewing to a particular time of day (Lugalia, 2003). This American statistic is similar to the findings from the present study of Canadian students. In this research, findings show that many students reported restrictions placed upon television viewing. The most common restrictions were prohibiting shows due to content, placing time limits on the activity, barring the activity until homework or chores were complete, or requiring parental permission before watching.

It is important to consider the type of commercials that youth are seeing. For example, some stations do not have commercials for products because they are publicly funded; in this case, all advertisements are about the programs aired on the station. In other cases, specialty stations show commercials for a particular group of people (e.g., Spike TV is a station targeted to men and airs commercials for products and services that will interest this audience). To learn more about the types of commercials that students view, participants were asked to list their three favourite shows, day and time they viewed the program, and the station they watched. Based on participants' reports of their favourite shows, it is evident that
they are seeing a wide range of products advertised on television. Only a small number of respondents claimed to watch their favourite shows on Family, YTV, or Teletoon, which are channels designed for a younger audience. Instead, students' favourite shows were aired between 8:00 p.m. and 10:00 p.m. This means that they are watching commercials intended for a mature audience.

The Most Effective Type of Media Literacy Instruction

The type of media literacy instruction that is most effective is important, because teachers have limited instructional time and in this time they have numerous curriculum objectives they must meet. By knowing the type of instruction that is most effective in teaching media literacy skills, teachers are able to design activities that maximize instructional time. In the present study, the findings show that media literacy instruction does improve media literacy skills. Specifically, those activities that include an analytic component or an analytic and production component are significantly better at increasing media literacy skills than those activities that include only a production component. To understand the research results, students' knowledge, attitudes, and behaviours towards commercials are summarized.

Knowledge of commercials. Knowledge is considered an important way to offset the power of advertising (Adams & Hamm, 2000; Summers, 1997). To pinpoint the areas upon which teachers need to focus when teaching media literacy skills, the research will be examined to identify what students already know about commercials and the change that occurs after media literacy instruction.
The ability to understand the purpose of advertising is considered an important media literacy skill (Schiebe & Rogow, 2004). According to Lloyd-Kolkin and Tyner (1991), children need to consider who is communicating the media message and why. The research findings show that students already know a lot about advertising. For example, they can recognize forms of advertising. At the time of the pretest, students in the study knew that commercials, flyers, billboards, and radio announcements were types of advertising. However, many did not consider a logo on clothing to be advertising. This is interesting, because logos are used by companies to breed brand awareness. After instruction, this changed, with significantly more participants in both the Analysis and Analysis and Production groups identifying a logo as a type of advertising as opposed to the participants in the Production and Control groups, which did not. These findings show that teenagers can recognize obvious forms of advertising; however they do not notice when the marketing is subtle. Teachers need to bring students' attention to how companies subtly market their products.

Commercials are an obvious form of advertising, and students know they are designed for profit. They understand this fact without any instruction at all. In this study, the majority of respondents agreed or strongly agreed with the statement, "Commercials are used to help make a company money." This finding is similar to the Kubey and Serafin (2001) study that found that the majority of students agreed with this statement. What these findings indicate is that students understand why commercials are on television. They know that advertisers are trying to get the viewer to spend their money to purchase the advertised product.
What is interesting is that despite knowing why commercials are on television, students are reluctant to admit that they have any persuasive power. At the time of the pretest, very few respondents agreed or strongly agreed with the statement, "People are strongly influenced by the things they see in commercials." This opinion did not change after media literacy instruction.

One explanation for the reluctance of participants to change their attitude may be that they were experiencing cognitive dissonance. According to Slavin (1991), cognitive dissonance theory holds that people experience discomfort when new ideas clash with their long-held beliefs. Often this tension can cause people to reject new ideas. They will rationalize and make excuses in an attempt to ignore the information that contradicts their viewpoint. In the case of commercials, participants were uncomfortable acknowledging that these media messages could influence their thoughts, values, or purchases. For this reason, they rationalized that this fact was true only for other people but not themselves. These findings indicate that teachers need to help students make the connection that if commercials are designed to make a company money, then that means they are designed to transform the viewer into a consumer, and the only way this happens is by influencing individuals' thinking.

The ability to identify the product and main message in a commercial is considered an important media literacy skill (Schiebe & Rogow, 2004). The research findings show that no instruction is required for students to be able to have this ability. At the time of the pretest, the majority of participants were able to identify the product advertised in both a toy and a financial planning
commercial as well as describe the main message. For this reason, there is little need for teachers to emphasize this area of knowledge.

The ability to discern target audience is also considered an important media literacy skill (Schiebe & Rogow, 2004). The research findings show that students have a basic understanding of target audience. The majority of participants in the pretest could identify the definition of target audience on the Media Literacy Test. Aside from knowing the definition, students also recognize that advertisers make commercials to attract a targeted group of people. In the pretest, the majority of participants agreed with the statement, "Commercials are made in a special way to get people of certain ages to watch them." For the most part, students already know that commercials are not intended for all viewers but instead are meant to attract a certain group of people.

Moreover, students already possess the ability to recognize themselves as a target group. The majority of participants could identify five or more items from a list of eight correct choices that were sold to their age group. They knew that cars, dining room furniture, homes, and investments were products not sold to people their age. They also knew that video games, pop, potato chips, and bubble gum were items sold to people their age. However, they were less likely to recognize cereal, board games, or toys as items sold to people their age. It is likely that students viewed these items as suitable for a younger age group. It is recommended that these items be removed from the measurement tool and replaced with more age-appropriate items such as cell phones or I-pods.
Despite having all this knowledge of target audience, students struggle to apply it. In the Media Literacy Test, participants viewed a toy commercial and a financial planning commercial. For each one, they had to describe the target audience such as their gender, age, job/role, race, and interests. At the time of the pretest very few students could identify attributes of the target audience. However, after instruction, significantly more participants were able to list three or more attributes in the Analysis and Analysis and Production groups than participants in the Production or Control groups. This finding is similar to Kubey and Serafin (2001), who found that instruction increased students’ ability to describe target audience.

It is believed one of the ways to have students become less influenced by commercials is to make them aware of how advertisers use selling techniques to manipulate the viewer (Lloyd-Kolkin & Tyner, 1991; Summers, 1997). The research findings support the need to teach students about selling techniques. Very few students at the time of the pretest could list selling techniques. However, after instruction, significantly more participants were able to list three or more selling techniques in the Analysis and Production group than participants in the Production, Analysis, and Control groups. The increased ability to identify selling techniques after media literacy instruction is similar to Kubey and Serafin’s (2001) research findings that showed 75% of participants were able to list three or more selling techniques after taking part in media literacy activities.

Participants that made the most gains in identifying selling techniques completed a combination of analytic and production activities. This lends support
to the belief that video production is an effective activity for teaching media literacy skills, however only when paired with analytic activities. According to Worsnop (1994), the production of media helps students to understand that the creator makes deliberate choices for distinct purposes. By constructing their own commercials, students were able to put themselves in the role of an advertiser, and this provided an opportunity for them to look at commercials in a new way. Students were able to use the selling techniques of professionals to advertise their own product, and by doing this, they gained an understanding of how commercials are designed to manipulate the viewer.

Not only were students that completed both analytic and production activities able to list more selling techniques, but also they were able to identify subtle tactics used by advertisers. In particular, they recognized speed as a selling technique. At the time of the pretest, very few participants agreed with the statement, "The action in commercials is so fast that the details are difficult to remember." However, on the posttest, more participants in the Analysis and Production group either agreed or strongly agreed with the statement "The action in commercials is so fast that the details are difficult to remember" than participants in the Production, Analysis, and Control groups. However, this difference was not significant. Speed is commonly used by advertisers (Gottschalk, 1999), and it is a great way to include hidden messages about social values and stereotypes without the viewer noticing. To have students recognize this tactic is an important step to their realizing the power of the media to manipulate viewers.
The ability to recognize social values in commercials is considered an essential media literacy skill (Schiebe & Rogow, 2004). The research findings show that students do not recognize hidden messages in commercials without media literacy instruction. During instruction, participants struggled to notice hidden messages. They seemed reluctant to acknowledge that social values could exist within advertisements. Students had to analyze numerous types of commercials before they could consistently identify these values. Teachers in the study proposed that students' difficulty was developmental and was not limited to commercials but was rather a broader problem that relates to students' ability to notice subtleties. If this is true, then advertisers are placed in a powerful position where it becomes easy to manipulate youth. With many teens wanting to be popular, attractive, and cool, advertisers are able to prey on their desires.

Media literacy instruction was found to improve students' ability to detect social values. After completing media literacy-based activities, the ability to recognize social values was significantly higher for participants in the Analysis and Analysis and Production groups than participants in the Production and Control groups. These findings are similar to those found by Kubey and Serafin (2001), who noted an increased ability to identify social values after taking part in media literacy-based activities.

The ability to discern stereotypes is another important media literacy skill (Schiebe & Rogow, 2004). This is because it is believed stereotypes have the ability to shape individuals' understanding of the world, including their beliefs about gender roles and racial equality (Coltrane, 2000; Coltrane & Adams, 1997;
Summers, 1997). The research findings show that students have a limited understanding of stereotypes. At the time of the pretest, few participants described stereotypes in a commercial. However after media literacy instruction, significantly more participants in the Analysis and Production group and Analysis group could identify a stereotype in comparison with participants in the Production and Control groups.

It was observed during the study that students were uncomfortable discussing racial stereotypes. According to Grant (2003), discussions about race can evoke negative emotions, as it is difficult for people to acknowledge these types of biases. He proposes that to help make students feel more comfortable speaking about issues of prejudice, privilege, and discrimination, group discussion should be supplemented with other activities such as personal essays, journal writings, and small-group projects.

Although students' knowledge of target audience, selling techniques, social values, and stereotypes increased after media literacy instruction, it is not known whether this change is permanent. Do students continue to think about the message in a commercial, or does this behaviour decline over time? This concern was raised by one of the teachers involved with the study: "[I wonder] when they start viewing newer commercials as to whether they take the knowledge that they learned and apply it to the new commercials as well." This is an interesting question for further research, because it examines the long-term influence media literacy instruction has upon students.
Attitude towards commercials. Aside from knowledge, a healthy attitude is considered a good defense against the power of advertising. A positive attitude includes skepticism (Summers, 1997) and a lack of materialism (DeAngelis, 2004). According to Linn et al. (1982), adolescents begin to acquire a healthy skepticism towards advertisements. This research supports this finding. At the time of the pretest, the majority of respondents were already skeptical about commercials. They indicated a strong agreement towards the following statements, "You can't believe everything you see in commercials," "I don't trust advertising very much," and "The products in commercials are exaggerated, compared to what you actually buy." They also indicated a strong disagreement to the statement, "I think what you see on commercials is true." This attitude did not strengthen after media literacy instruction.

Media literacy instruction was found to have no influence upon materialism. At the time of the pretest, students ranged in their opinion towards the statement "I wish I had a lot of things I see in commercials," with an equal distribution among participants that agreed and disagreed with this statement. This attitude did not change after media literacy instruction. Since research findings have found that when people watch commercials they are more likely to desire the advertised items (Buijzen & Valkenburg, 2000; Pine & Nash, 2002) and that materialists place unrealistic expectations on the ability of consumer goods to influence their relationships, autonomy, and happiness (DeAngelis, 2004), it is necessary to conduct more research in this area.
Behaviour towards commercials. The research findings show that students enjoy commercials. Despite having the technology to avoid advertisements, teenagers prefer not to use it. As mentioned previously, many students stop fast-forwarding a prerecorded show during commercial breaks when they see an ad they want to see. In addition, the majority of students at the time of the pretest disagreed with the statement, "I mute the TV to not have to hear the commercials." When asked why they did not use the television remote to prevent themselves from hearing them, students stated that it was because they like commercials. In fact, many teenagers turn them up. At the time of the pretest, students indicated agreement towards the statement, "I like commercials and will sometimes turn them up." Media literacy instruction was not found to change this behaviour. Although it has been documented that people's attention towards the television declines during commercials (Zuckerman et al., 1978), these findings show that people attentively watch those they find entertaining. These findings indicate a need for teachers to place an emphasis upon humour as an effective selling technique.

The goal of any commercial is to transform the viewer into a consumer of the product. To do this, the advertisement needs to create a desire for the item. The research findings indicate that students do ask for items they see in commercials. At the time of the pretest, more than one fifth of participants agreed to the statement, "I ask my parents to buy me things I see on commercials." This behaviour did not change after media literacy instruction. Since research findings have found that when people watch commercials they are more likely to request
the advertised item (Buijzen & Valkenburg, 2000; Pine & Nash, 2002), it is necessary to conduct more research in this area.

One of the goals of media literacy instruction is to have students become active viewers that ask questions about what is contained in media messages (Lloyd-Kolkin & Tyner, 1991; Ontario Ministry of Education, 1989; Summers, 1997). These research findings lend support to the belief that media-based activities will help students acquire critical thinking skills (Learmont, 2003). On the Media Literacy Rating Scale, at the time of the pretest, very few participants agreed or strongly agreed with the statement, "I think about the message a commercial is trying to make." However, after media literacy instruction, the majority of participants in the Analysis and Analysis and Production groups indicated that they think about the message contained within an ad in comparison with participants in the Production and Control groups, where less than a third of respondents agreed with the statement. However, the difference was not found to be statistically significant. For this reason more research needs to be conducted to gain an understanding of the association between media literacy and critical thinking.

*The Teaching Strategies That Overcome Obstacles*

Although teachers want to teach media literacy skills, often there are barriers to having them incorporate analytic and production activities into curriculum (Yates, 2002). The literature identifies common obstacles including a lack of resources (Hobbs, 1998; Tyner, 2003; Yates), professional development (Hobbs, 1998; Kubey, 1998; Tyner, 2003; Yates), time (Hobbs; Tyner; Yates,
2002); difficulty assessing nonwritten forms of student work (Hart, 2001; Tyner); lack of confidence (Hart), and unreliable equipment (Hart; Hobbs) as reasons teachers do not incorporate media literacy skills into curriculum. This study identified several strategies for overcoming some of these challenges.

Many teachers cite the lack of resources as one reason they do not teach media literacy (Hobbs, 1998; Tyner, 2003; Yates, 2002). In this study, the Internet was used to locate suitable commercials. When analyzing these commercials, there were some challenges to instruction. It was found that the commercials were so entertaining that they competed for students' attention. One method used to overcome this difficulty was to turn off the computer monitors during group discussion. Another issue was getting students to write their insights about media messages. To encourage quality reflections, students' work was graded. Another challenge was students' difficulty in noticing hidden messages in commercials, such as social values. One method that was found to be successful was to analyze commercials targeted to students' age group because they were found to be easier for students to deconstruct. Another challenge during instruction was the discomfort students felt about racial stereotypes. To frame the discussion, statistics about visible minorities and their exclusion in media messages were provided.

Many teachers lack the confidence to teach production activities (Hart, 2001). This study identified several teaching strategies that were effective in overcoming some of the challenges when making a commercial and that if they are used, should help reduce some of the anxiety. To reduce the commotion
associated with filming, video recording stations were positioned in more than one location throughout the school. Since video production is a team activity, several strategies were used to avoid the pitfalls of co-operative group work. For example, students were strategically placed into production teams, each student was responsible for producing their own commercial out of the footage the production team filmed, and conferencing was used to keep groups on task. As well, to help students organize their ideas, modeling was used to complete a storyboard.

Another obstacle cited by teachers for not incorporating production activities into curriculum is time (Hobbs, 1998; Tyner, 2003; Yates, 2002). To ease the time constraints during filming, students were given frequent reminders to bring in their props to ensure they would be adequately prepared. During filming, "time checks" kept students focused. As well, computer class was strategically scheduled before recess or lunch to gain a few extra minutes during the filming portion of the media literacy activities in case they were required.

Another barrier identified by teachers to teaching production activities is unreliable equipment (Hart, 2001; Hobbs, 1998). In this study, to avoid this obstacle the technical support person was contacted to help install hardware and software. As well, the equipment was tested in advance of each lesson to notice problem areas. In addition, students were encouraged to save often to prevent losing their work. It is believed that if teachers use some of these strategies, they will limit the difficulties when incorporating media literacy activities into curriculum.
Implications

What are the implications of the research findings? In this section, the implications for teacher practice and further research are examined. This exploration provides insight into the viability of teaching media literacy skills as well as key areas that require further investigation.

Implications for Practice

In this study, the research findings indicate that analytic or a combination of analytic and production activities are significantly better at increasing media literacy skills than just production activities. However, although participants who engaged in both analytic and production activities made the most gains, their media literacy skills were not significantly higher than participants that completed just analytic activities. These findings have implications for classroom teachers.

Engaging in both analytic and production activities is without a doubt beneficial to students. These research findings show that students who complete both types of activities are able to better deconstruct commercials to recognize the purpose, target audience, selling techniques, stereotypes, messages, and social values. Moreover, they are more likely to think critically about media messages. However, despite the benefits, it is important to acknowledge that teaching video production is a time-consuming activity. In fact, it takes considerably longer to teach a unit that includes a production component in comparison to one that includes only an analytic component. Moreover, many teachers do not have the expertise in using video capture equipment and editing software. For this reason, if time is an issue, or teachers' lack technical knowledge, instead of abandoning
teaching media literacy skills altogether, they should consider limiting instruction to only analytic activities. By doing so, their students will still acquire many essential media literacy skills.

It is important to note that the type of analytic activities that were part of this study are not time-consuming, yet they are highly effective. Although there were 10 assignments, these were completed in only eight 45-minute class periods. The teacher who facilitated this class felt that instruction could have taken even less time and commented on what he would change: "I don't think I would take as many sessions. I think it could probably be done in almost half that time." What this means is that in only one week, for one class period a day, teachers can cultivate critical thinking and change how students view media messages. This amount of instructional time for teaching media literacy is reasonable for many teachers.

Moreover, these findings send a cautionary note to teachers. Production is fun. Often when planning activities it is easy to think of all the products that students can create as part of a curriculum unit. However, when done in isolation, these activities have limited benefit to students. The participants in the Production group enjoyed the activities that were part of media literacy instruction. One student wrote about his or her favourite part of the unit, "I liked making the commercial because it was really fun." This comment summarizes the sentiment of participants that took part in production activities. As well, the teachers who engaged in production activities also had a great time making commercials. One teacher commented about the video production activities, "I thought they were
really fun. I think the kids really enjoyed doing them." However, even though production activities are enjoyable, they must be done in combination with analytic activities. Only then will students gain the media literacy skills they need to be critical of media messages.

This study has implications for teachers. It indicates that if teachers are concerned about not having the time to teach media literacy skills, it does not take an unreasonable number of class periods to make a difference in students. As well, these findings also show the importance of teaching production activities in combination with analytic activities to ensure instruction is meaningful.

Implications for Further Research

This study has implications for further research. In this section ideas to improve data collection are discussed. Moreover areas for future study are outlined.

In this study, instruments such as the Media Literacy Rating Scale were adapted from the Kubey and Serafin (2001) study. Changes were made from the original design based on pilot test results. However, further enhancements are necessary to improve the quality of this instrument. The Media Literacy Rating Scale included knowledge, attitude, and behaviour statements. In retrospect, it was not a good idea to combine three different types of statements into one instrument. Instead, the knowledge statements should have been removed and placed onto the Media Literacy Test and the attitude and behaviour statements placed onto separate instruments.
Another proposed change to the Media Literacy Rating Scale should be the modification of the statement about the influence of commercials. In this study, the statement "People are strongly influenced by the things they see in commercials" was classified as a knowledge statement. Instead, this statement should be considered an attitude statement because it measures students' opinion about the influence of commercials as opposed to knowledge of advertising.

In addition to reclassifying this statement, it should also be reworded into multiple statements. In the study, no significant change was found in students' opinion towards the statement, "People are strongly influenced by the things they see in commercials." It may be because the word "influence" is confusing to students. Instead, to gain an understanding of students' perception of the influence of commercials several statements could be used such as "Food commercials often make me feel hungry," "Commercials often help me decide what I want to buy," "I often want to be like the people shown in a commercial," "I often feel pressure to buy the things I see in commercials," "Commercials try to make you believe that your life will be better if you buy the product," or "I often think my life would be better if I had the products I saw in commercials."

Another idea that would improve data collection is the addition of student interviews. The ability for students to convey their understanding of media is limited in paper-and-pencil tests such as the Media Literacy Rating Scale and Media Literacy Test. Interviewing participants would have been useful in clarifying students' knowledge, attitudes, and behaviours towards commercials.
Another proposed change that should be implemented when conducting further research is to provide equal instructional time to each treatment group. In this study there was an 80 minute difference between the instructional time received by participants in the Analysis and Production group and participants in the Analysis group, Production group, and Control group. The difference in time is an extraneous variable that presents a limitation to the study. The time difference was considered necessary due to the work required to produce a commercial. However, if the area of media study was changed to a different form of advertising it might eliminate the time difference. For example, less work and technical knowledge is required to create a magazine advertisement or poster than to create a commercial that requires extensive knowledge of video editing software and video production equipment.

This study has implications for future research. The research supports many educators' belief that media literacy instruction makes students more media literate. The findings show that when students engage in either analytic or analytic and production activities, their knowledge of commercials improves, a healthy skeptical attitude is cultivated, and they think more critically about media messages. Moreover, it indicates that although there is support for video production as an activity to promote media literacy skills, this activity cannot be done in isolation but rather must be a part of a curriculum unit that contains analytical activities that have students deconstruct media messages. Although media literacy instruction was found to increase media literacy, it did not have
any effect on materialism or consumer habits. These areas require further investigation.

Despite engaging in analytic and production activities, no change was found in students' materialistic values. Materialism is considered an important attitude as it encourages individuals to value worldly possessions and makes them often believe purchased items will make them successful, wealthy, or popular. Materialists place unrealistic expectations on the ability of consumer goods to influence their relationships, autonomy, and happiness (DeAngelis, 2004). It is important for researchers to study the types of activities that can reduce materialistic values.

Another area for future study is the transfer of knowledge. Students often struggle to apply knowledge to new situations. It would be interesting to examine whether students could transfer their knowledge about target audience, selling techniques, social values, or stereotypes to other forms of advertising such as magazine advertisements, posters, or radio announcements.

As well, another area for further study would be other forms of advertising or media. For example, instead of analyzing and producing commercials students could analyze and produce magazine advertisements, posters, or radio announcements. In addition, it would be interesting to study if students can apply media literacy skills to other forms of media such as television shows, movies, or music videos. Within these forms of advertising and media students could examine similar concepts such as target audience, selling techniques, social values, or stereotypes.
Conclusion

There is a need for research that provides evidence that the time engaged in media education enhances educational opportunities for students (Tyner, 2003). The purpose of this study was to compare the influence forms of media literacy instruction has on students' level of media literacy. Specifically, the question investigated was "What forms of media literacy instruction are most effective in changing students' knowledge, attitudes, and behaviours towards commercials?"

The research findings showed that although students can identify forms of advertising and understand the purpose of commercials, they are not discerning viewers. However, after taking part in analytic or a combination of analytic and production activities, they were able to deconstruct a commercial to list attributes of the target audience, describe selling techniques, identify social values, and detect stereotypes better than students that completed only production activities. This research provides insight into the activities that promote media literacy and substantiates the belief that media literacy instruction makes students "media literate."
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The Brock University Research Ethics Board has reviewed the above research proposal.

DECISION: Accepted as clarified.

This project has received ethics clearance for the period of December 7, 2005 to March 31, 2006 subject to full REB ratification at the Research Ethics Board's next scheduled meeting. The clearance period may be extended upon request. The study may now proceed.

Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and cleared by the REB. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to http://www.brocku.ca/researchservices/forms to complete the appropriate form Revision or Modification to an Ongoing Application.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-Council Policy Statement requires that ongoing research be monitored. A Final Report is required for all projects upon completion of the project. Researchers with projects lasting more than one year are required to submit a Continuing Review Report annually. The Office of Research Services will contact you when this form Continuing Review/Final Report is required.

Please quote your REB file number on all future correspondence.

LRK/bb
Appendix B

Assignments

Below is an outline of the activities each group completed:

Analysis Group
Participants in the Analysis group engaged in various activities that required them to analyze the content of commercials by viewing advertisements using Windows Media Player. Specifically they completed the following 10 assignments:

- **Assignment 1 You and the Media**: Students considered their consumption of media and identified forms that contain advertising.
- **Assignment 2 About Commercials**: Students learned about the purpose of commercials. Afterwards, students calculated the number of commercials viewed in a lifetime.
- **Assignment 3 Are you a Target?**: Students learned about target audience. They studied commercials to identify the target audience, describe their attributes, and explain how the ad aimed for this group.
- **Assignment 4 Selling Techniques**: Students were introduced to proven strategies for selling a product. They analyzed commercials to identify the selling techniques used.
- **Assignment 5 What is the Message?**: Students learned how advertisers convey obvious and hidden messages. They studied commercials to identify the messages.
- **Assignment 6 Stereotypes**: Students learned about gender and racial stereotypes. They studied commercials to recognize stereotypes and proposed ways to modify the ads to eliminate them without reducing the commercial's effectiveness.
- **Assignment 7 Language Used in Commercials**: Students considered how language was used to attract and hold viewer attention. They analyzed commercials to identify how words are spoken and shown on the screen.
- **Assignment 8 Analyze Persuasion and Production Techniques**: Students viewed the commercial “sodalicious” to notice the persuasion techniques used in the pop commercial.
- **Assignment 9 About Camera Techniques**: Students considered how the type of shot, camera angle, and movement convey a message to viewers. They studied commercials to notice the use of the camera within the ad.
- **Assignment 10 Can you Spot the Details?**: Students considered how the speed of action could make it difficult to remember details in commercials. They viewed an ad once and then answered questions that required them to recall specific information about the content.
Production Group
Participants in the Production group engaged in various activities that required them to create their own advertisement using video production equipment and Windows Movie Maker. Specifically they completed the following 10 assignments:

- **Assignment 1 The Movie Maker Environment**: Students were introduced to the program environment for Windows Movie Maker.
- **Assignment 2 Edit a Commercial using Windows Movie Maker**: To learn the program tools, students edited the raw footage for a pop commercial "sodalicious" by deleting unwanted frames, applying video effects, adding transitions, inserting text overlays, and importing music.
- **Assignment 3 How to Use the Camera**: Students were introduced to basic camera terminology and functions. They then practiced how to take different kinds of shots, use multiple camera angles, and apply various types of movement.
- **Assignment 4 Plan and Organize Ideas for a Commercial**: Students formed video production teams. Together they planned an idea for a commercial. They used a storyboard to divide their commercial into shots. For each shot, they outlined the action, characters, message, camera information, and material.
- **Assignment 5 Film the Commercial**: Working in their video production teams, students captured the footage for each shot.
- **Assignment 6 Delete Unwanted Frames**: Each student took the raw footage from the previous assignment and used Windows Movie Maker, to delete any unwanted frames.
- **Assignment 7 Apply Special Effects**: The “cleaned up” shots from the previous assignment were then enhanced using special effects built into Windows Movie Maker. Special effects included the addition of text overlays, video effects such as fade in or out, and transitions between shots.
- **Assignment 8 Add a Voiceover or Background Music**: Students either narrated the action in the commercial or imported a sound file to complete their advertisement.
- **Assignment 9 Examine the Commercial and Make Corrections**: Using a checklist as a guide, students analyzed their commercial and then made the necessary edits.
- **Assignment 10 On the Air**: The commercials were exported from Windows Movie Maker as a movie file. The ads were shared with viewers.
Analysis and Production Group
Participants in the Analysis and Production group engaged in various activities that required them to analyze the content of commercials using Windows Media Player and then create their own advertisement using video production equipment and Windows Movie Maker. Specifically they completed the following 18 assignments:

- **Assignment 1 You and the Media:** Students considered their consumption of media and identified forms that contain advertising.

- **Assignment 2 About Commercials:** Students learned about the purpose of commercials. Afterwards, students calculated the number of commercials viewed in a lifetime.

- **Assignment 3 Are you a Target?** Students learned about target audience. They studied commercials to identify the target audience, describe their attributes, and explain how the ad aimed for this group.

- **Assignment 4 Selling Techniques:** Students were introduced to proven strategies for selling a product. They analyzed commercials to identify the selling techniques used.

- **Assignment 5 What is the Message?** Students learned how advertisers convey obvious and hidden messages. They studied commercials to identify the messages.

- **Assignment 6 Stereotypes:** Students learned about gender and racial stereotypes. They studied commercials to recognize stereotypes and proposed ways to modify the ads to eliminate them without reducing the commercial's effectiveness.

- **Assignment 7 Language Used in Commercials:** Students considered how language was used to attract and hold viewer attention. They analyzed commercials to identify how words are spoken and shown on the screen.

- **Assignment 8 The Movie Maker Environment:** Students were introduced to the program environment for Windows Movie Maker.

- **Assignment 9 Edit a Commercial using Windows Movie Maker:** Students viewed the commercial "sodalicious" to notice the persuasion and production techniques used in the pop advertisement. They then learned the program tools in Windows Movie Maker by editing the raw "sodalicious" footage, by deleting unwanted frames, applying video effects, adding transitions, inserting text overlays, and importing music.

- **Assignment 10 About Camera Techniques:** Students were introduced to basic camera terminology and functions. They studied commercials to describe the use of the camera and explain how it speeds up the action to prevent the viewer from noticing details.

- **Assignment 11 How to Use the Camera:** Students practiced how to use a video capture device to take different kinds of shots, use multiple camera angles, and apply various types of movement.
Assignment 12 Plan and Organize Ideas for a Commercial: Students formed video production teams. Together they planned an idea for a commercial. They considered the target audience they wanted to attract, selling techniques they wanted to use, and messages they wanted to convey in their ad. They then used a storyboarded to divide their commercial into shots. For each shot, they outlined the action, characters, message, camera information, and material.

Assignment 13 Film the Commercial: Working in their video production teams, students captured the footage for each shot.

Assignment 14 Delete Unwanted Frames: Each student took the raw footage from the previous assignment and used Windows Movie Maker, to delete any unwanted frames.

Assignment 15 Apply Special Effects: The “cleaned up” shots from the previous assignment were then enhanced using special effects built into Windows Movie Maker. Special effects included the addition of text overlays, video effects such as fade in or out, and transitions between shots.

Assignment 16 Add a Voiceover or Background Music: Students either narrated the action in the commercial or imported a sound file to complete their advertisement.

Assignment 17 Examine the Commercial and Make Corrections: Using a checklist as a guide, students analyzed their commercial and then made the necessary edits.

Assignment 18 On the Air: The commercials were exported from Windows Movie Maker as a movie file. The ads were shared with viewers.

Control Group
Participants in the Control group engaged in digital art activities using the program PhotoFiltre. They created artwork that reflected their mood, style, and interests.

Note. From TechnoCommercial Student Workbook (pp. 1-121), by TechnoKids Inc., 2007, Oakville, ON: TechnoKids Inc. Copyright 2007 by TechnoKids Inc. Adapted with permission.
Appendix C

Selling Techniques

Excerpt taken from Assignment 4 in the Analysis curriculum unit and Analysis and Production curriculum unit.

A company cannot tell a person about their product if they are not watching the television when their commercial is playing. For this reason, advertisers use proven selling techniques to attract and then hold viewer attention. Some techniques are:

- **Be Like Me:** The commercial shows a person doing something that makes the viewer want to be like the character.
- **Big Question:** A question is posed that the product answers.
- **Celebrity:** A famous person is shown using the product.
- **Expert:** The benefits of the product are listed. Often statistics are used to prove the product is good.
- **Fantasy:** Animated characters, special effects, or cartoons are used to create a make believe world.
- **Good Times:** An activity is made to look exciting because of a product.
- **Humour:** The commercial is made to be funny.
- **Jingle:** Words are set to a catchy tune to try to get the viewer to sing the song.
- **Made you Look:** The effects, sound, or imagery in the commercial catch your attention.
- **Name Calling:** Unpopular terms about the competition are used to make the advertised product look better.
- **No Promises Here:** Words make statements not promises about the product. For example, "may help," "chances are," or "virtually."
- **Plain folks:** Average people who look like friends or neighbors sell the product.
- **Side by Side:** Two products are shown side-by-side in a demonstration situation. The product that is advertised is shown to be better.
- **Slogans or Catchphrases:** The commercial uses simple phrases that are easy to remember.
- **Sounds Good:** The words used to describe the product make it sound great.
- **Testimonials:** A person who actually uses the product talks about the benefits.
- **Torture Test:** The product is exposed to a variety of hazardous conditions to prove the strength and durability.
What Techniques are Used?

Advertisers use different techniques to get people to view their commercials. You are now going to watch television advertisements to see if you can spot the selling techniques being used.

Double click the Commercial shortcut or ask your teacher how to get to the Commercial folder.

**Phone Commercial**

Double click the phone commercial. It opens in Windows Media Player and starts to play. To watch the commercial again, click the Play button.

1. What selling techniques are used? (You can check more than one technique)
   - Be Like Me
   - Fantasy
   - Made you Look
   - Slogan or Catchphrase
   - Big Question
   - Good Times
   - Name Calling
   - Sounds Good
   - Celebrity
   - Humour
   - No Promises Here
   - Testimonial
   - Expert
   - Jingles
   - Side by Side
   - Torture Test

**Gum Commercial**

Double click the gum commercial. It opens in Windows Media Player and starts to play. To watch the commercial again, click the Play button.

2. What selling techniques are used? (You can check more than one technique)
   - Be Like Me
   - Fantasy
   - Made you Look
   - Slogan or Catchphrase
   - Big Question
   - Good Times
   - Name Calling
   - Sounds Good
   - Celebrity
   - Humour
   - No Promises Here
   - Testimonial
   - Expert
   - Jingles
   - Side by Side
   - Torture Test

**Video Game Commercial**

Double click the video game commercial. It opens in Windows Media Player and starts to play. To watch the commercial again, click the Play button.

3. What selling techniques are used? (You can check more than one technique)
   - Be Like Me
   - Fantasy
   - Made you Look
   - Slogan or Catchphrase
   - Big Question
   - Good Times
   - Name Calling
   - Sounds Good
   - Celebrity
   - Humour
   - No Promises Here
   - Testimonial
   - Expert
   - Jingles
   - Side by Side
   - Torture Test

*Note. From TechnoCommercial Student Workbook (pp. 15-16), by TechnoKids Inc., 2007, Oakville, ON: TechnoKids Inc. Copyright 2007 by TechnoKids Inc. Adapted with permission.*
Appendix D

Language Used in Commercials

Excerpt taken from Assignment 7 in the Analysis curriculum unit and Analysis and Production curriculum unit.

The words used in a commercial, whether spoken or written, can get the viewer to want to buy the product. Advertisers use common tactics when picking words for their commercial:

✓ Made up words: The words are not real but they sound GREAT!
✓ You can’t read it: Details about the product such as warranties or limitations are written in very small print so that it is hard to read.
✓ Evidence: Research is used to prove the viewer can trust the product. For example, phrases such as "developed after years of research," "proven results," "in taste test more people preferred," or "nine out of ten" are a way to gain viewers confidence.
✓ Numbers count: Number words are used to gain confidence and report facts such as "in business for over 35 years," "3.5 hp engine," or "millions of people."
✓ Almost true: Promises are almost made about the product such as "virtually" spotless, "helps" control, or "may" reduce. You will notice that no guarantees are stated.
✓ Great descriptors: The product is described using words that make it sound amazing.
✓ Feel the emotion: Words and how they are spoken are used to evoke an emotion such as worry, anger, fear, trust, happiness, sadness, or excitement.
✓ Repeat, repeat, repeat: Words are shown or spoken over and over again to make viewers remember the product.
✓ Feel the pressure: Words are used to make the viewer feel pressured into buying the item immediately with phrases such as "Buy now" or "For a limited time only."
✓ Believe the hype: The product is exaggerated to make it seem important. This is done using words such as "largest," "best in its class," "extraordinary," "revolutionary product" or "greatest product of all time."
✓ Bribery: The viewer is told they will get something they want if they buy the item. For example, "Buy one, get one free," "Purchase now, pay later," or "Receive a free television when you purchase."
✓ Ask a question: Questions are asked that the viewer answers at home with either "yes" or "no." This tactic gets the viewer to see the product as a solution to a problem. For example, phrases such as "Have you ever," "Do you need," or "Is problem getting you down."
✓ Flattery: Nice words are used to compliment the viewer into believing that they are so smart or beautiful they should have the product. For example, phrases such as "Don’t you deserve," or "You are worth it."
✓ Special ingredients: The product is described as having a special ingredient that makes it work so well, taste so great, or look so good.
✓ We are in this together: The company wants the viewer to see them as a trusted friend with a solution to their problem. To do this they use phrases such as "together we can do it," "at company name we care," "we know what you need," "with company name you can."
✓ Call to action: The viewer is asked to do something. Words are stated as commands such as "call now," "buy it today," or "bite into it" tell a person to act.
Listen to the Words to Spot the Tactic

You are going to watch several commercials. Listen to the words and watch the screen to notice the print you see displayed. Can you spot the tactics the advertiser is using to get the viewer to buy the product? You will need to watch them more than once.

TACO COMMERCIAL

Double click the Commercial shortcut or ask your teacher how to get to the Commercial folder.

Double click the taco commercial. It opens in Windows Media Player.

Watch the commercial. How were words used to get the viewer to want the item? (you can check more than one)

- made up words
- you can't read it
- evidence
- numbers count
- almost true
- great descriptors
- feel the emotion
- repeat, repeat, repeat
- feel the pressure
- believe the hype
- bribery
- ask a question
- we are in this together
- call to action

FINANCIAL PLANNING COMMERCIAL

Double click the financial planning commercial. It opens in Windows Media Player.

Watch the commercial. How were words used to get the viewer to want the item? (you can check more than one)

- made up words
- you can't read it
- evidence
- numbers count
- almost true
- great descriptors
- feel the emotion
- repeat, repeat, repeat
- feel the pressure
- believe the hype
- bribery
- ask a question
- we are in this together
- call to action

STORE COMMERCIAL

Double click the store commercial. It opens in Windows Media Player.

Watch the commercial. How were words used to get the viewer to want the item? (you can check more than one)

- made up words
- you can't read it
- evidence
- numbers count
- almost true
- great descriptors
- feel the emotion
- repeat, repeat, repeat
- feel the pressure
- believe the hype
- bribery
- ask a question
- we are in this together
- call to action

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Appendix E

About Camera Techniques

Excerpt taken from Assignment 3 in the Production curriculum unit, Assignment 9 in the Analysis curriculum unit, and Assignment 10 in the Analysis and Production curriculum unit.

When advertisers make commercials they want the ads to get and hold viewer attention. One way they do this is by taking different types of shots, using various camera movements, and changing the angles. This makes each shot look special, which keeps viewers from getting bored.

Read to learn about how the camera can be used in different ways to capture the action. Afterwards, you will watch a hair commercial to see if you can notice how the camera was used.

Types of Shots

The type of shot taken depends on what objects you decide to include. You can include lots of objects, one object, or just a small piece of an object. It is always a good idea to use many types of shots in a commercial because this stops the viewer from losing interest.

**Extreme Long Shot**

In an extreme long shot, there is a lot of background. This shot is used to tell the viewer about where the action is taking place in the commercial. This type of shot does not have a lot of detail and if overused can make a commercial boring.

**Long Shot**

In a long shot, the main object is entirely in view and there is still some background. In a commercial, this shot can be used to show a person using the product.

**Medium Shot**

In a medium shot, half of the main object is in view. If the object is a person, this means it shows them from the waist up. In a commercial, this shot shows more detail, which makes it more interesting to watch.

**Close Up**

In a close up shot, just a small part of the main object is in view. In a commercial, this shot gives specific detail and is a great way to tell the viewer about the product. This type of shot can also be used to show emotion by including only a person’s head.

**Extreme Close Up**

In an extreme close-up shot, a very small part of the main object is in view. In a commercial, this is used to show a great amount of detail, such as the product name. This type of shot if overused can limit the amount of information given to a viewer, which can make them lose interest.
Types of Angles

There are three basic types of camera angles. The camera can point up, down, or straight across.

Low Angle
A low angle has the camera pointing UPWARDS at the object. This makes the item seem VERY BIG. In a commercial, this angle is a great way to make the product look important.

Normal Angle
A normal angle has the camera pointing STRAIGHT at the object. The camera is at eye-level. Most shots in a commercial are made using this angle because it is what a person would see if they were standing at the scene.

High Angle
A high angle has the camera pointing DOWN on the object. This makes the item seem VERY SMALL. In a commercial, this angle is a great way to show a competitor’s items as a poor choice or as a problem going away.

Types of Movement

There are three basic ways that the camera can move. It can move forward and back, from side to side, or up and down. In a commercial these can be overused and can easily distract viewers. Use them sparingly!

Pan
Panning is when the camera moves from side to side. This is used to follow the story action as the objects move.

Zoom
Zooming is when the camera moves forward to show the object up close, or backwards to show the object far away. This movement can draw the viewer into the action.

Tilt
Tilting is when the camera moves up or down. This can be used to look over a product in detail, or show what a person sees if they look up or down. This movement is a great way to add interest.

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Appendix F

Storyboard

Excerpt taken from Assignment 4 in the Production curriculum unit and Assignment 12 in the Analysis and Production curriculum unit.

Complete the storyboard for your commercial.

<table>
<thead>
<tr>
<th>Shot 1</th>
<th>Shot 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action:</strong> Sketch the action:</td>
<td><strong>Action:</strong> Sketch the action:</td>
</tr>
<tr>
<td>Describe the action:</td>
<td>Describe the action:</td>
</tr>
<tr>
<td><strong>Characters:</strong></td>
<td><strong>Characters:</strong></td>
</tr>
<tr>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Message:</strong> Which words are used in this shot?</td>
<td><strong>Message:</strong> Which words are used in this shot?</td>
</tr>
<tr>
<td>How will you share the words with viewers?</td>
<td>How will you share the words with viewers?</td>
</tr>
<tr>
<td>□ dialogue □ text overlay □ narration</td>
<td>□ dialogue □ text overlay □ narration</td>
</tr>
</tbody>
</table>

Select the shot type, angle, and movement:

**Type of Shot**
- □ Extreme Long Shot
- □ Long Shot
- □ Medium Shot
- □ Close Up Shot
- □ Extreme Close Up Shot

**Angle**
- □ High
- □ Normal
- □ Low

**Movement**
- □ None
- □ Pan
- □ Tilt
- □ Zoom

<table>
<thead>
<tr>
<th>Material:</th>
<th>Material:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. From TechnoCommercial Student Workbook (pp. 79), by TechnoKids Inc., 2007, Oakville, ON: TechnoKids Inc. Copyright 2007 by TechnoKids Inc. Adapted with permission.*
Appendix G
Exposure to Media Survey

Part 1: What do you have in your home?

Circle the number of items you have in your home. Circle if you have the item in your own room.

<table>
<thead>
<tr>
<th>Item</th>
<th>How many items do you have in your home?</th>
<th>Do you have this item in your bedroom?</th>
</tr>
</thead>
<tbody>
<tr>
<td>television</td>
<td>0 1 2 3 4+</td>
<td>yes no</td>
</tr>
<tr>
<td>VCR</td>
<td>0 1 2 3 4+</td>
<td>yes no</td>
</tr>
<tr>
<td>DVD player</td>
<td>0 1 2 3 4+</td>
<td>yes no</td>
</tr>
<tr>
<td>computer WITH internet</td>
<td>0 1 2 3 4+</td>
<td>yes no</td>
</tr>
<tr>
<td>computer WITHOUT internet</td>
<td>0 1 2 3 4+</td>
<td>yes no</td>
</tr>
<tr>
<td>video game player</td>
<td>0 1 2 3 4+</td>
<td>yes no</td>
</tr>
<tr>
<td>radio</td>
<td>0 1 2 3 4+</td>
<td>yes no</td>
</tr>
<tr>
<td>CD player and/or MP3 player</td>
<td>0 1 2 3 4+</td>
<td>yes no</td>
</tr>
</tbody>
</table>
**Part 2: What do you do with your Time?**

Think about a typical weekday in your life. For most of the day you are sleeping or in school. However, there are 1 or 2 hours in the morning and 6 or 7 hours in the evening when you can do your own thing. In fact, you are most likely to have between 7 and 9 hours when you can choose how you spend your time.

Below is a list of activities. For each item in the list:

- ✓ Tell how much time you spend on a typical WEEKDAY doing the activity by placing a checkmark in the box to show your answer.
- ✓ Tell if you do the activity AT THE SAME TIME that you do something else. For example, you may surf the Internet AT THE SAME TIME you listen to music AND chat with friends.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time Spent</th>
<th>Do you do this activity at the SAME TIME you do something else?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch Television</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Watch Movies</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Surf the Internet</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Play Video Games</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Listen to the Radio</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Listen to CDs or Music Files</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Talk on the Phone</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Chat using the Computer</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Email using the Computer</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Read Magazines</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Read Books</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
<tr>
<td>Participate in a Sport/Club</td>
<td>□ NONE</td>
<td>□ 2 hours</td>
</tr>
<tr>
<td></td>
<td>□ 30 minutes</td>
<td>□ 3 hours</td>
</tr>
<tr>
<td></td>
<td>□ 1 hour</td>
<td>□ 4+ hours</td>
</tr>
</tbody>
</table>

Appendix H

Media Literacy Rating Scale

What do you think? How much do you agree or disagree with the following statements. Circle the answer that shows how you feel.

1. I wish I had a lot of things I see in commercials.
   -2    -1    0    1    2
   strongly disagree  disagree  unsure  agree  strongly agree

2. You can't believe everything you see in commercials.
   -2    -1    0    1    2
   strongly disagree  disagree  unsure  agree  strongly agree

3. I want to have the things I see in commercials so that people will think I am cool.
   -2    -1    0    1    2
   strongly disagree  disagree  unsure  agree  strongly agree

4. I don’t trust advertising very much.
   -2    -1    0    1    2
   strongly disagree  disagree  unsure  agree  strongly agree

5. The products in commercials are exaggerated, compared to what you actually buy.
   -2    -1    0    1    2
   strongly disagree  disagree  unsure  agree  strongly agree

6. I think what you see on commercials is true.
   1    2    3    4    5
   strongly disagree  disagree  slightly agree  agree  strongly agree

7. I think it is important to know about the techniques used to sell things in commercials.
   -2    -1    0    1    2
   strongly disagree  disagree  unsure  agree  strongly agree

8. I mute the TV to not have to hear the commercials.
   -2    -1    0    1    2
   strongly disagree  disagree  unsure  agree  strongly agree

9. I ask my parents to buy me things I see on commercials.
   -2    -1    0    1    2
   strongly disagree  disagree  unsure  agree  strongly agree

10. I like commercials and will sometimes turn them up.
   -2    -1    0    1    2
    strongly disagree  disagree  unsure  agree  strongly agree
11. I think about the message a commercial is trying to make.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

12. I ask questions about the commercials I see on television.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

13. I talk with others about the commercials I see on television.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

14. People who make commercials do a lot of thinking about how to attract audiences with their messages.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

15. Commercials are used to help make a company money.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

16. Commercials are made in a special way to get people of certain ages to watch them.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

17. Everyone understands commercials in the same way.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

18. People are strongly influenced by the things they see in commercials.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

19. The people in commercials are actors hired to speak lines and perform.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

20. Words in commercials are specially chosen to make you want to buy the item.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

21. The action in commercials is so fast that the details are difficult to remember.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Appendix I

Media Literacy Test

**Media Literacy Test – Part 1**

1. Circle the items that are types of media: (you can circle more than one)
   - magazines
   - movies
   - books
   - computer
   - telephone
   - television
   - videogames
   - music

2. Circle the items that are types of advertisements: (you can circle more than one)
   - commercials
   - movies
   - radio announcement
   - television
   - books
   - billboards
   - videogames
   - logo on clothing

3. Circle the things commercials try to sell people who are about your age:
   (you can circle more than one)
   - board games
   - cereal
   - dining room furniture
   - toys
   - cars
   - potato chips
   - videogames
   - homes
   - bubble gum
   - pop
   - clothes
   - investments

4. What is a target audience?
   a. An audience that likes to watch media messages.
   b. A group of people that are most likely to purchase the item advertised.
   c. A group of media messages shown to viewers.
   d. A group of people that are least likely to purchase the item advertised.

5. What is a stereotype?
   a. An overly simple way of showing how a person looks, talks, and acts, based on their age, sex, and race.
   b. An opinion about commercials that is based on the type of people in the advertisement and how they look, talk, and act.
   c. A truthful way of showing how a person talks, acts, and looks based on their age, sex, and race.
   d. The type of person most likely to purchase the item advertised.
Media Literacy Test – Part 2

COMMERCIAL 1 Financial Planning

1. What is the product being sold?
   Pacific Life Financial Services
   Or Services include life insurance, annuities, mutual funds, and investments

2. Describe the people you think the commercial is trying to get to use their product. List as many things about them that you can.
   Gender: males (1 mark)  
   Job/Role: father, family, or parents (1 mark)  
   Age: 30-45 (1 mark) adults or older (1 mark)  
   Race: White (1 mark)

3. What are some of the ways the commercial is trying to attract and hold the viewer's attention? List as many as you can.
   Imagery: Objects shown in the commercial that attract attention and are appealing (whale, scenery, boat, text on screen, logo, characters)
   Action: A description of what is happening in the commercial (sail on boat, spend time with family, whale watching)
   Sound: The sound that is heard during the commercial (music, voiceover)
   Wording: Words used in the commercial that hold your attention (i.e., building a legacy)
   Tactics: Common advertising tactics:
      Be Like Me The commercial shows a person doing something that makes the viewer want to be like the character. *(You will have a big boat, watch whales, and spend time with your family if you have this insurance)*
      Slogan The commercial uses simple phrases that are easy to remember. *Power to Succeed*
      Emotional Appeal The language evokes an emotional response.
   Production Techniques: Common ways to produce a commercial:
      Camera shots, movements, angles, and speed

4. What is the main message in the commercial?
   Buy this insurance.
   You will be financially secure if you plan for your future with Pacific Life.

5. What are the hidden messages in the commercial?
   happiness success
   good relationship with family wealth

6. Are there stereotypes in the commercial? If yes, what are they?
   Gender: There are no women in the commercial.
   Race: There are only White people.
COMMERCIAL 2 Toy

7. What is the product being sold?
   Bratz Big Babies
   Or Dolls

8. Describe the people you think the commercial is trying to get to use their product. List as many things about them that you can.
   Gender: female or girls (1 mark)  Job/Role: children or kids (1 mark)
   Age: 3-12 or grade range (1 mark)  Interests: playing with dolls (1 mark)
   young or little (1 mark)
   Race: White (1 mark)

9. What are some of the ways the commercial is trying to attract and hold the viewer's attention? List as many as you can.
   Imagery: Objects shown in the commercial that attract attention and are appealing (dolls, scenery, text on screen, characters, emotion of characters, cake)
   Action: A description of what is happening in the commercial (play hide n seek, play with dolls)
   Sound: The sound that is heard during the commercial (music, voiceover)
   Wording: Words used in the commercial that hold your attention (i.e., so cute)
   Persuasion Tactics: Common advertising tactics:
     Be Like Me: The commercial shows a person doing something that makes the viewer want to be like the character. *Have fun playing with dolls*
     Good Times: The commercial shows a person having fun with the product
     Slogan: The commercial uses simple phrases that are easy to remember. *So Cute*
   Production Techniques: Common ways to produce a commercial:
     Camera shots, movements, angles, and speed
     Special Effects: animated characters

10. What is the main message in the commercial?
    Buy this doll.
    Bratz are cute and fun to play with.

11. What are the hidden messages in the commercial?
    popularity
    happy
    fun
    cool

12. Are there stereotypes in the commercial? If yes, what are they?
    Gender: Girls like dolls. Girls act silly.
    Race: There are only White people.
