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CONTENTS
Articles and Statements

Life Story as a Research Technique for Evaluating Formation Processes in Media Literacy for Social Change. Approaching a Case of Success of the Educational Project "Training, Education and Innovation in Audiovisual Media to Raise Awareness of Hunger in Nicaragua"
Emma Camarero, David Varona ................................................................. 4

The Image of the White Movement in the Western Feature Cinema (1931–2016)
Alexander Fedorov ................................................................................. 11

Age as a Factor in Evaluation of Media Literacy Levels in Slovakia
Dana Petranova, Norbert Vrabec ............................................................... 18

Conceptual Challenges in Designing Measures for Media Literacy Studies
W. James Potter, Chan Thai ........................................................................ 27

The Impact of Media Literacy Curriculum on the Literate Behavior of At-risk Adolescents
Irving Lee Rother .................................................................................. 43

Reflections on Information Literacy
Art Silverblatt ....................................................................................... 54
Life Story as a Research Technique for Evaluating Formation Processes in Media Literacy for Social Change. Approaching a Case of Success of the Educational Project "Training, Education and Innovation in Audiovisual Media to Raise Awareness of Hunger in Nicaragua"

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Abstract

Life story has been repeatedly resorted as a research technique in the field of social sciences. The data provided of life stories in the context of the assessment of how learning in media literacy could serve to improve the living condition of an individual, are especially interesting. This paper presents a first scientific approach to study of a success story in media literacy through education project “Training, education and innovation in audiovisual media to raise awareness of hunger in Nicaragua (Nica Project)”. It shows how narrative knowledge is created and constructed through the story Oduber Guevara – one of young people without resources who has participated in this formation- tells about his lived and trained experiences, and explores the concept of ‘narrative knowing’ (Bruner, 1986). Information provided by his live story has been completed with other investigative techniques, which add data about the relevance, appropriateness and necessity to creation of a model of media literacy focused on social change in order to promote empowerment and employability in poor communities.

Keywords: Life story, media literacy, education, social change, case study, audiovisual media, qualitative method, Nicaraguan, training, empowerment.

1. Introduction

From August 2011 to February 2014, with the support and funding of the University of Salamanca (USAL), the regional government of Castilla y León (Spain), the non-profit organization Action Against Hunger-Central America (ACH-C), the Spanish Agency for International Development Cooperation (AECID), and the collaboration of Nicaraguan official institutions, the project "Training, education and innovation in audiovisual media to raise awareness of hunger in Nicaragua (Nica Project)" took place. This initiative was integrated in a European Union grant, within the Food Security Thematic Program Europe Aid. The main aim was to promote training in audiovisual and media literacy for rural and urban young poor people. The training focused on proficiency of video production and editing, networks, radio and graphic editing with accessible audiovisual technology, available to the communities. The goal was that they achieved communication abilities and knowledge about hunger and food security, using innovative methodologies to strengthen local institutions and its technical capacities, and sensitize public

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opinion towards articulate synergisms between local actions and public policies for social change. This project acted in the interests of the Nicaraguan youth without financial resources, in urban as well as rural areas, with the aim of eradicating audiovisual and media illiteracy, using accessible technologies, becoming aware of food security, and thanks to this specialized training, becoming agents of local development and improving their career prospects. (Camarero, Cuadrado y Herrero, 2015)

One of the main objectives of media education is, in fact, to teach the audience not only to analyze media texts of various types and genres, but also to understand the mechanisms of their construction and functioning in society (Fedorov and Levitskaya, 2015: 115). This training was essentially carried out in intensive courses in Managua, which involved 30 participants in different phases, selected by local partner institutions through cover letters. Young people from 17 to 21 years old, most of whom came from very poor families, told the purposes whereby they wanted to be accepted in this training. Once different phases of education project were finished -including their participation in the production and shooting of a documentary about their experiences-, in April 2014 we carried out online interviews in order to analyze this project such a case study, and evaluate the degree of satisfaction of both participants and institutions responsible and their point of view about the need to implement new training projects in media literacy for social aimed to new groups of young people.

However, from our point of view, these documents are partial data because it does not allow properly assess the scope of an educational project as Nica Project and its possible influence on the social and professional change of individuals who participated in. Neither does it acknowledge the importance of this training as a pivotal moment between the starting point of these young people and its current social and economic situation as well as their current knowledge in media literacy. So we also decided using the quantitative point of view of life story as a version of narrative inquiry. This paper shows the first data about this case of training in media literacy for social change after inclusion of Oduber Guevara's life story. We think that life story is a relevant and appropriate methodology so this kind of knowledge construction invites us to pay attention to the details of local stories and the contexts in which they are embedded (Etherington, 2009: 225), and it help us to assess to what extend a particular educational process may be essential for promoting social change.

2. Materials and Method

For analyzing the scope of Nica Project in relation with increasing or not of the chances of young people to finding a better job, improving their economic status and involving in social change through their knowledge in media literacy, we use different instruments, materials and data.

Firstly, the case of study was driven through 32 online interviews, 21 from participants and 11 from institutions. The participant’s interview had 39 questions, and the institution’s interview had 31. These in-depth interviews used closed and open questions to valorize and organize the obtained results. We carried out these interviews in November 2014.

In a second phase, we used documents -in particular life story and cover letter-, related to Oduber Guevara, one of the participant of Nica Project. Oduber Guevara was 21 years old when he participated in different phases of Nica Proyect from 2011 to 2013. Currently, he works as director of Communication of Radio Sandino and director of contents of CCEN Online Radio (Cultural Center of Spain in Nicaraguan Radio), and production chief of Canal 6 TV. After analysing his social and economic starting point before this training, and analysing his currently situation we can considerate Oduber a case of success.

We conducted a conversation with him, literally recorded and transcribed it. This conversation took place in March 2016. The date was not choosen at random; Oduber had finished his training in Nica Proyect two years ago, and at this moment we could analyse if this training period had a significant relevance, medium and long term, on his social change, improvement of his employment and economic status and his ability in media literacy.

Subsequently, data was crossed and categorized for carrying out the biographical text. For this analysis of these data, we used NVivo, a qualitative treatment software. This software
facilitates the issues’ organization, the discovery of recurring elements in the story and the creation of a categorization scheme for a socio-educational analysis.

3. Discussion

Certainly, first research results presented in this paper show, mainly, a particular analysis of data obtained of Oduber Guevara’s life story, and therefore it would be essentially a qualitative biographical methodology, which allows to can address complex individual problems and to go deeper into the past and previous experiences as key factors in the analysis of the present and the current circumstances of individuals. As Bertaux (1981) says, biographical research is ideal for understanding personal experiences in poverty, oppression or exclusion. Understanding, on his own point of view, how the participation in Nica Project has influenced on Oduber’s life, and also analyzing the information from online interviews from both participant and institution, we obtain data that allow us to make a first assessment of the results of this project, the level of satisfaction of participants and institutions and its effectiveness linked to social change (media literacy, employment, knowledge of general problems of Nicaraguan, etc.)

When we talk about life stories, we highlight this is one of descriptive research methods more pure and powerful to explore links between people and the world around (Cordero, 2012). Traditionally, life stories have been applied to disciplines such as Sociology, Social Psychology, Antropology or Psicoetherapy; and, according with the research focus, structure and treatment can vary. When we talk about life story as a research technique addressed to understand the individual evolutive process after receiving, as in this case, a specific training, the structure of story life has to be essentially open to allow subject's creativity and subjectivity to add data to the biographic story. In that order, Oduber's life story has been based on a procedure wich consisted in evoke and structure his life memories from a subjective point of view, from his own look. We were interested in rebuilding his present not only with objective data, such as dates and places, but, specially, searching for information related to his ideas, values, projects, social relationships, etc.

In the case of Oduber, life history, and qualitative research seeks to discover the dialectical relationship, everyday negotiation between aspiration and possibility, between utopia and reality, between creation and acceptance; therefore, its data comes from everyday life, common sense, explanations and reconstructions that the individual makes to live and survive daily (Ruiz Olabuenaga, 2012). In short, and as Etherington (2009: 225) says, life stories allow us to bring together many layers of understandings about a person, about their culture, and about how they have created change in their lives: we hear people struggle to make sense of the past and create meanings as they tell and/or ‘show’ us what happened to them.

According to Brine (2006), individuals are not in a process of precise and passive reproduction but resist and answer the conditions of their experience. The individual is therefore an active agent, who is able to build its identity with a logic that allows us to better understand the sociocultural space which is part element.

So this research analyzes the scope of Nica Project as a possible model in the training process in Media Literacy for social change, and its ability to replicate in other individuals and groups of young people without resources and use in this study of history life as a research technique for obtaining relevant data, taking into account the personal experience and the positive socio-economic evolution that transcends this first analysis Oduber Guevara’s life story.

Oduber’s life story in relation with his participation in Nica Proyect. Analysis of first results

Oduber’s life story is also a document of a well-known person to one of researcher of this paper, who was also director and teacher of Nica Project and filmmaker of the associated documentary. Over this period between training and interview, their relationship are be continued, in the same way as it was with other young people of this project. A training like that, whom main goal is to teach for empowerment and improvement of social and economic condition of participants, must be monitoring over a long period. We needed to know the evolution or involution of participants because these data are essential if we wanted to repeat this training with success. Richardson (2000) reminds us that context for sharing stories does not need to be limited
to face-to-face meetings. In this case, we believe this relationship have been positive for this research in the context of the creation a relaxing and free atmosphere in Oduber’s interview.

Oduber Guevara is 25 years old, he is just married and he works for Radio Sandino, Radio CCEN and Canal 6 TV in Nicaraguan when we interviewed him. At the same time, he is finishing Management Communication studies. It is very common to be a moonlighter in this country, where most of jobs are part-time or with low salary. He was born in his mother’s home in Somoto, capital of department of Madriz, in Northern Nicaraguan, after the end of war and Sandinista revolution. It was a very hard period; people returned from the line of battle, there were no work and a lot of villages and cities were destroyed. He is the second of five brothers and sisters. His parents came from Las Sabanas (mother), and Telpaneca (father) two very little and poor rural communities of Madriz.

Certainly, his childhood was very poor, almost without economic resources. His father, after fighting in the revolution and coming back home, constantly changed work –precarious jobs-, and passed many periods far from his family. Her mother has always worked in a plant nursery, and all of her children helped her after the school. Despite this poverty, Oduber has not a negative feeling about this period of his life; on the contrary, he is very proud of his origins and the effort of his family to give him an education:

They came to Somoto ... with the goal of building a new life...basically I worked at home and worked at school, with lessons ... I worked in the morning... always studied the late shift ... in the morning, we basically dedicated ourselves to be with her, at plant nursery ... I studied from 12 am to 5 pm, and when I came back home, did homework ... weekends worked with them ... then, there was a time when my dad lost his work, he moved to work in Managua, as security guard ... he was long time out of home ...

... With 15 years old I had to start working to study in the university*, I had to work to pay it ... so it was very difficult. My older brother had already happened it, I knew his experience ... because we had no the chance to study or have money, then we always are behind in our studies...

... That feeling that dad and mom are proud of me, and tomorrow will help them... I know that chances I have had with this, they did not have ... always you want to do anything else for your parents...

We can noted that Oduber has not any trauma about his childhood or poverty situation, and he does not feel any resentment of injustice about his personal social and economic previous situation. He felt loved by his family and he appreciated the few chances they gave him. In fact, positive experience in his early years, make him to see all of circumstances of his life (including his participation in Nica Project), as a chance to seize:

I thought if only we approved... we had thought that Somoto is 216 kilometers from Managua, is a little town with only eleven districts, Managua is much larger city ... one comes there with fear ... but it was a chance ... that a kid from 216 kilometers away, among many people, could be in this process of training, and learned with professional people. So that fear was passed ... the feeling of this situation, that we could participate in that process, was larger. Then we took up the challenge...

... Then we applied, a huge number of people around the country applied too... I always wanted to take up the challenge no matter how big it was, working in community radios, and also work on local television and then work on a national radio, I always take up the challenges...

... I’ve always preferred to get out of the comfort zone, I never liked to say that and I just did it all ... then in the future, my first goal is to finish, because I am very close to finish my degree in business and then continue my training ...

* In Nicaraguan, university system is not comparable with others countries. People can enroll with 15-16 years old, and most of these institutions have not a quality system of evaluation, so the level of teaching and research are very low. Popularly, Nicaraguan people calls these kind of institutions as “garage universities”.
... Dreams could be met because there have always been people who have pushed one in a race and so dreams can be achieved. I think there are many good people who can help us to build our dreams, and dreams are not built for one, so you have to be clear, dreams are built for all, dreams are built giving ... dreams are built with effort, with people who give you the tools to fight and go in your life, basically that. You have to take every opportunity, and success is achieved from failure to failure and I think that will continue going through many challenges and many barriers...

... Maybe some people could think it is as any one project (Project Nica) ... but really, its value is what it means for the people's lives. And this experience I have personally lived was nothing of this, for me it was a transformation.

For Oduber, Nica project was a chance to change his reality and improve his social economic and professional situation, but not only; during the interview, he referred to the importance of using his knowledges and skills in media literacy, acquired with Nica project, to promote empowerment and social change, demonstrating in this way his sense of belonging to his community. In addition, he spoke about the need for repeating this kind of training in new young people generations:

Basically, it is not the same that a single individual wants to transmit a message that ... when we explain things in an audiovisual way. I have always believed that through the screen one can transform messages in magic and if it's magic goes even further ... to share ideas through television, through audiovisual ... 

... we have the same goal: helping and sending a message to the people. And the messages that we usually send are negative, and conversely, constructive messages and this is how I think you can make changes ... I think we have contributed, everyone involved, teachers and students, kids that even now engaged in communication, I think that's the most important thing: people who have your same goal and that if we joined we could do it. I believe it was shown, it has been achieved and we will be able to continue to achieve, I'm sure ...

... We did the training, which was necessary for us to work video from a traditional way, why? Because we were just landed and it was the way in which we could do it. What I would change? Well, I think it should not be a project for one year, two years, but should always be ... new generations of kids have this dream of forming ... even we can tell them that we were young like them and we have achieved our dreams thanks to Nica Project ... and to be decisive to change the life of a kid and the communication of a country.

... Although we were from communities, neighborhoods, very poor families, we could make a training ... we have been many us who have followed this way and I think that we will continue for a long. I think what we should do is to promote a genre of educational spaces, spaces that transform and contribute to society ... using tools like this that can reach the people, educate people in a positive sense.... there are young people who are showed all these social problems ... making them part of the message, because they suffer these kind of social problems ...

... I believe there is a lot to do and contribute to society ... and then I have a goal that I'm sure I can accomplish that is to teach communication and not here in Managua, no, I want to do there, in the northern of the country, Somoto, Esteli, there are very few opportunities to study communication there is very little space, but I think I have a future and that if I put my mind I will succeed. Creating my own space or regional media ... that it may be self-sustaining and may generate opportunities in kids...

... There are many kids and girls in communities, young people of those generations that technology ... radio, layout, all about new technologies ... the need to generate that kind of content. So I think that Nica Project is basically essential...

... Making actions that give our people, if we form the kids in communication, we may make products with ever increasing technical requirements and quality... I also think that there are people working this kind of social issues and I think we have to move to this level to communicate in a clearer way and with better results.
...I could ensure that the issue of communication is essential to give a message to our peoples, municipalities ... when they see us, to be folk. So when you see a kid in a poor neighborhood in a communication media, the message is we have produced and we succeeded.

In his interview, Oduber show himself as a person with a deep feeling of his role in Nicaraguan society. His story make sense of his experience, but also the present and future experience of others kids like him: poor, without few economic resources, in marginal neighbors or villages, but full of dreams. He based his point of view in what he has experimented, media literacy as the ability to access, understand and create communications in a variety of contexts (Buckingham, 2007: 44). Access thus includes the skills and competencies needed to locate media content, using the available technologies for social change. Maybe this is a so much positive view of real range of possibilities for young people in Nicaraguan, but it has the value of being his particular point of view. In this sense, life story, as qualitative methodology seeks to capture such a process of interpretation, seeing things from the perspective of people who are continually interpreted and defined themselves in different situations (Taylor and Bogdan, 1998). Therefore, qualitative methodology allows working reality from a humanist perspective and trying to understand human behavior from the framework of people own.

4. Results

The results obtained from the analysis of the participant’s in-depth online interviews largely confirm some of the Oduber’s statements, especially those related to improvement of personal and family economic situation of participants. These results have been subject to a first analysis by Camarero et al. (2015). For instance, some of the results obtained from these interviews indicate that:

- 90.4% of interviewees are currently working. Of these, 80.9% work in a job related to communication and/or media.
- 71.4% opine that the training has helped to find a better job.
- 66.6% believe that the training has also helped to improve their family lives.
- 76.1% think that the media literacy achieved has helped them to know the reality of their own country.
- 100% of interviewees believe that training can help to improve the lives of their fellow citizens and neighbors.
- 81.8% of the interviewed institutions opine that training in media literacy and audiovisual technology can help to improve the economy of development.
- 100% of the institutions believe that this training model is able to be applied to other poor communities or countries.

5. Conclusion

In this paper, we add to these results the first analysis of data of a qualitative technique. Life stories make up a phenomenological perspective, which displays human behavior, what people say and do, as the product of the definition of their own world. But we must be aware that when we speak about media literacy, even when people speaks about their own experiences, it is important to recognize the continuing existence of a ‘digital divide’ in young people's access to technology. The gap between the technology rich and the technology poor is apparent at a global level, yet it also persists in many of the apparently ‘wired up’ regions of the world. (Buckingham, 2007: 50) These differences are also important in relation with how young people take up the chance to produce media products as video, podcast, layout or digital text for social change. Training in poor communities about media literacy must adapt it to the real circumstances of classroom groups; it is not only a problem of access to technology, we must know the need of communication of young people, the social environment and the use of media in their communities. Media Literacy is shaping up to be an emerging topic at the intersection of field of communication and education (Hobbs, 2005).

This first approach to analyze of Oduber`s life story, together with the analyze of online interviews as well as the data collected on field in Nicaragua, confirm that Nica project could
become the base of the creation of a model of media literacy focused on social change in order to promote empowerment and employability in poor communities is possible. The case study observes the main bases of building a model of media literacy; in summary, thanks to specific training of video, radio, networks and layout editing for social change, these young Nicaraguan people have become spokespersons for their communities, empowering them to develop future communication projects and greatly improving the socioeconomic status of them and their families. (Camarero et al., 2015). The use of life story as a research technique in this study, show us a particular perspective of importance of media literacy training for an individual. Events from the past take on extraordinary meaning over time as their significance in the overall story of our lives and times is realised, depending on the stocks of knowledge we have available to us at any one time, and this changes as we mature and learn (Etherington, 2009: 232).

Life story in this research is a really useful skill in the design of programs to training the use of technology and media literacy, which is based on psycho-educational settings that encourage young people to use it in a positive way, and among other aspects, there is the personal contribution of those who will want to develop their interactive projects, yet as an opportunity to make the world a better place.

References
The Image of the White Movement in the Western Feature Cinema (1931–2016)

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Abstract

This article gives the way for hermeneutic analysis of the topic of the White movement in the mirror of the Western cinema (1931–2016). The hermeneutical analysis suggests media text comprehension through comparison with historical, cultural tradition and reality; penetration of its logic; through comparison of media images in historical and cultural context by combining historical, hermeneutical analysis of the structural, plot, ethical, ideological, iconographic / visual, media stereotypes and analysis of media text characters. An analysis of this kind of media texts, in our opinion, is particularly important for media literacy education of future historians, culture and art historians, sociologists, psychologists and educators. Thus, the comparative analysis of plot schemes, characters, and ideology of the Western feature films of 1931–2016, in varying degrees of affecting the subject of the White movement, leads to the conclusion about the essential similarity of their media stereotypes. Content analysis of screen media texts of 1931–2016 on the topic related to the White movement allows generally to submit their basic narrative schemes.

As for the film of CIS countries, here is, as before, the history of the civil war in Russia, probably will be somewhere in the periphery of the repertoire.

Keywords: White movement, Western cinema, films, Russia, film studies, media literacy.

1. Introduction

Based on the research of Western scientists (Keen, 1986; Lafeber, 1990; Levering, 1982; Small, 1980; Strada, 1980; Strada and Troper, 1997), we can conclude: the political, ideological, historical, socio-cultural aspects of the theme of the evolution of the screen image of the White movement is still poorly understood. Of course, some aspects of this subject were touched on before. For example, Western scientists have published many books and articles about “the image of enemy”, i.e. Red Russia on the screen (Keen, 1986; Strada, and Troper, 1997; Taylor and Spring, 1993, etc.). However, these authors did not set a goal of comparative analysis of the transformation of the image of the White movement in the Soviet, Russian and Western cinema.

2. Materials and methods

The main materials for this article was the area: the books, articles and Western films about the White movement in Russia. I used also the method of hermeneutic analysis of the cultural context of media texts (Eco, 1976; Silverblatt, 2001). This method connected with the key concepts...
of media literacy education (*media agencies, media categories, media language, media technologies, media representations, media audiences* etc.).

3. Discussion

In general, foreign feature films rarely refers to the events of the Civil War in Russia and the White movement, but on the heels, in the 1920s, this theme was reflected in Western movies more noticeable.

I believe that among the main reasons of ignoring by Western cinema of the 1930s – 1940s the topic of the White movement was relatively expensive show of fighting the civil war in Russia with dubious prospects for big box-office. That’s why in those rare films that have had at least some relation to the specified topics, White officers, the Cossacks, etc. were shown already in exile, where they boozed, sang songs and danced in restaurants (*Balalaika*) fell in love with beautiful women, etc.

Many of the films that will be analyzed further, for decades found themselves outside the field of view of local and foreign culture experts, political scientists, historians and film experts. For example, in Soviet time it was "not accepted" in general to mention that in Nazi Germany films on a Russian theme were made. Even in solid monograph by N.I. Nusinova devoted to Russian cinematic frontier of 1918-1939, published in the XXI century, this topic gets round (Nusinova, 2003). And this despite the fact that in the cinema of the Third Reich there were active not only famous star Olga Chekhova (1897-1980), and director Victor Turzhansky (1891-1976), actors Nicholas Kolin (1878-1966), Boris Alekin (1904-1942) and others. The researcher of the history of the Nazi A.V. Vasilchenko in his book about the cinema of the Third Reich (Vasilchenko, 2010) did not focus their attention on the Russian subjects of German films of the period as well.

On the shooting of German films on a Russian theme, of course, specific events that occurred during the 1930s – 1940s influenced. With the coming to power of Hitler a trend of confrontation of the Third Reich and the USSR was clearly denoted. Therefore, in a Nazi movie there were two concepts of reflection "Russian world": Russian Tsars and Russian emigrant which could receive positive cinematic interpretation (*Favorite of the Empress, This ravishing ballroom night, Midnight* and others.), while Bolshevism and the Council, on the contrary, always look negative on the screen.

In this respect, it is interesting movie by Karl Anton (1898-1979) under the eloquent title *Battleship "Sevastopol" - White slaves* (1937), where clearly used myth of the rebellious *Battleship "Potemkin"* (1925), brilliantly created by Sergei Eisenstein. And this is no accident as yet in 1933 at a meeting with German filmmakers then leader of culture department - Minister Joseph Goebbels said the following about the movie *Battleship "Potemkin"*: “This is a wonderful film. From a cinematic point of view, it is incomparable. One who is not firm in his beliefs, after its seeing, perhaps could become a Bolshevik. It proves once again that a masterpiece can be successfully incorporated a certain tendency. Even the bad ideas can be promoted by means of art” (Vasilchenko, 2010: 5). So, it was a sort of state order for the creation of the Nazi analogue to film by Eisenstein.

And in 1937 this order was made by K. Anton. In the movie *Battleship "Sevastopol" - white slaves* on the ship, like Eisenstein, sailors revolted as well. But this event was given with the opposite sign - the rebellion on *Battleship "Sevastopol"* is raisin by evil and cruel Bolsheviks who kills the noble officers, priests, raping women, burning Orthodox icons... But, thank God, there is a Russian officer, Count Konstantin Volkov, who collects these loyal Russian sailors, disarms the rebels and frees prisoners. At the end of the film count Volkov says the conceptual phrase: "This trouble is not only Russia. The enemies of civilization must be destroyed. The struggle continues!". And then some of the companions echoes: "People do not notice this danger...".

It should be noted that after the German attack on the Soviet Union in June of 1941, the royal and the émigré Russian went clearly in the cinematic shadow of the Third Reich, at best, found themselves on the periphery of the subjects (e.g., in the form of images of individual Russian in the episodes), while in melodrama *We live* (1942) in fascist Italy representatives of the Russian "old world", rendered under the power of the Bolsheviks, were shown a close-up and highly positive. But unlike the Soviet cinema, where from July 1941 to December 1942, was filmed over 70 shorts and full-length feature films, directly reflecting the current events of the war with Germany, the Nazi cinema made a major bet for operational military chronicle.
As for the Western cinema as a whole, it, like German, being the product of the mass / popular culture in films on a Russian theme, was based on folklore and mythological sources, including traditional ideas of the Western world about the "mysterious Russian soul".

As a result, in the western films it is clearly felt these promotional messages:

- Greatness of Russia was left in the distant past, when it was an empire in which culture flourished (a comedy about the life of Russian nobility epoch of Empress Elisabeth - A favorite of the Empress, musical melodrama about the life of P.I. Tchaikovsky This ravishing ballroom night and others);
- However, in the past imperial policy of Russia could be dangerous for other European countries (Warsaw Citadel, Cadets);
- After 1917 the sympathy may cause only Russians, suffered from the Bolsheviks, / or have emigrated to the West (Battleship "Sevastopol" - White slaves, Midnight, Crimson Dawn, Knight without armor, Balalaika, We live, and others.);
- The Bolsheviks carried out mass terror - both in relation to the elite of society and the civilian population, and strive to turn the Russian people into slaves (Battleship "Sevastopol", Heroes of Siberia);
- Armed resistance to the Bolsheviks is justified and necessary (Battleship "Sevastopol", Heroes of Siberia).

Since the beginning of the "cold war" the topic of the White movement almost completely disappeared from the Western screens, apparently lost all relevance in the eyes of Western filmmakers. Subjects of Soviet military threat and espionage came to the fore (Fedorov, 2015). Russian in last appeared on the screen as a relatively frequent film adaptations of Russian classics (A.P. Chekhov, F.M. Dostoevsky, L.N. Tolstoy, N.V. Gogol), novel Michael Strogoff by Jules Verne, in the history of the murder of Rasputin and miraculous resurrection of the murdered daughter of Nicholas II – Anastasia.

The most notable Western movies, somehow relating to the topic of the White movement, became melodramatic adaptation of Boris Pasternak's novel Doctor Zhivago (US, 1965) by David Lean and the drama of the death of the royal family Nicholas and Alexandra (UK, 1971) by Franklin Schaffner. In 1974, a small episode of the execution of the Romanov family by the Bolsheviks appeared in a large-scale drama The whole life by C. Lelouch. The drama of the era of the Civil War in Estonia Shot of Mercy (1976) by German director F. Schlöndorff and British teleplay The White Guard (1982) taken after had far less international attention.

The events of the second half of the 1980s in the Soviet Union a significantly influenced upon the reflection of the Russian theme on the Western screen, for example, it is appeared quite friendly movies depicting the Soviet people. However, the growing interest in the subject of the White movement didn't find its reflection in the foreign movie. On the contrary, I could not find a single Western film of 1986-1990, where the Whites have appeared, even in exile.

In the post-Soviet 1990s Russian topic remained quite popular in Western cinema. However, but it was a special the demand - in the form of a series of films about the brutal Russian mafia, prostitution for export, the atrocities of Stalinism and the other negative (I want to note for justice that there were other foreign films about Russia in the 1990s, for example, adaptation of Russian literary classics). In the cinema the theme "far abroad" of the White movement was touched upon in the last quarter of a century in only two films - melodramatic adaptation of the novel Zoya (US, 1995) by D. Steele and another film version of Doctor Zhivago (UK-Germany-United States, 2002). In both films Western cinema reflected the Russian topic in line with previous decades, showing sympathetic representatives of the "old world" and negatively - representatives of the new, Red.

Undoubtedly, the history of the White movement was much closer to Russian neighbors from the Baltic countries, Finland and Poland, which from the 1940s to the 1980s for obvious ideological reasons, avoid touching this subject in their films. But, having found support from the European Union, these countries over the last decade have put some dramatic movies on the theme of the Civil War: Guards of Riga (Latvia, 2007), Order (Finland-Germany, 2008), 1920. War and Love (Poland, 2010) and Battle of Warsaw, 1920 (Poland, 2011).

Drama Order, which talks about the cruelty of the civil war, looks White crow among these films in Finland in 1918. In fact, the authors decided to go against the current basic cinematreatment of White movement inherent in XXI century: the White Finns are shown in the "Order" as severe brutalized animals who raped and then shot captured Red girls. And one of the Whites,
using his authority, vile induces another to intimate relations (again somehow "un-European", it turns out quite politically incorrect!).

In the *Guards of Riga* Whites are also shown very negative, but here, on the contrary, respected and politically correct, and patriotic component is not forgotten by them: it's Russian White Guards, who, in the autumn of 1919 entered into an alliance with unwilling to admit defeat by German armies, set out to capture the independent Riga...

Prince led the Whites P.R. Bermont-Avalov (1877-1974) appears in the *Guards of Riga* grotesquely, almost in the spirit of the comedy *The Wedding in Malinovka* - sulfate, drunken bully. His German ally - General Rudiger von der Goltz (1865-1946) is given with a great enjoyed respect as a worthy adversary.

But the author of *Battle of Warsaw, 1920* – Jerzy Hoffman – seeks to show the balance of opposing forces: on the one hand on the side of the army of Marshal Józef Piłsudski (1867-1935) brave White Cossack troops fight, and on the other — no Red monsters, but worthy opponents with their believe.

In a realistic interpretation of J. Hoffman crushing defeat of the Red Army from the Polish troops led by Józef Piłsudski, the incident was on the August, 13-25, 1920, was the dramatic history of the collision not only the Red and White ideas, but also the Communist obsession with world revolution...

However the Polish film *1920. War and Love*, screened the year before, depicts a little Red as well as in the Soviet cinema of the 1930s were shown "White Poles" (a vivid example of this - *Fiery Years*, 1939). The Russian soldiers in this Polish TV series look like vile, arrogant, brutal boors who kill civilians, cut drafts captive, raped girls and noble Polish, etc. Polish officers and soldiers, on the contrary are the heroic defenders of their homeland, charming and intelligent people, loyal military oath and code of honor.

It is known that the Polish military campaign in 1920 was one of a few examples of the final victory of the anti-communist forces over the Reds during the Civil War. In times of socialist Poland, the topic was, of course, strictly censored in the film – as in Soviet and so in Polish. But now, during the anti-Russian sanctions, which since 2014 actively supported by the Polish government (as well as the governments of the Baltic countries), it is safe to assume that certainly the war of 1920 would just become a source for the demonstration of the Polish (and Baltic) patriotism and anti-Russian trends on the screen.

### 4. Results

*The structure of the stereotype image of the White movement in the Western movies of the 1930s - 1940s*

*Historical period, the place of action:* any period of time from 1918 to 1924, taking into account the presentation of life in exile this period can capture 1920–1940.

*Furnishings, household items:* there are the modest dwellings, forms and objects of everyday life of the poor characters (as they may be former White officers in exile), neat houses and household items of the rich characters, luxurious furnishings life of the Russian aristocracy before the Bolshevik revolution. Household items of Bolsheviks are shown with the share of the grotesque.

*Methods of representation of reality:* as a rule, it is a quasi-romantic image of the life of the characters of the White movement, grotesquely exaggerated image of the Reds.

*Characters, their values, ideas, clothes, physique, vocabulary, facial expressions, and gestures:* Red and White characters are differentiated: on the one hand, it is negative Red-Communist personages – the carriers of inhumane ideas, on the other hand – these are people who defend their principles and notions of honor, good and evil (the representatives of the White movement). Characters are shared by not only social, but also material status. Whites dressed richer the poor Reds. As for the body, there is allowed options – Whites on the screen (depending on the task) are either intellectuals or athletic looking men. These White characters are shown as generally refined and charming man with impeccable manners and refined vocabulary. Red characters – on the contrary, are rude, cruel, with a repulsive appearance and unpleasant voice tones. Characters Bolsheviks are usually wearing uniforms with the appropriate attributes (leather jacket, gun belts, revolver, etc.), They have a strong constitution, although they may have mediocre physical data; physiognomically they look unpleasant in most cases.
Male characters, personified the White movement, continue to dominate, however, among the enemies of the Communists you may find a beautiful and charming woman.

Russian characters of tsarist times as Russians, who emigrated from the Bolshevik regime to the West, are dressed according to the social status: the luxury of the imperial court, the expulsion of modesty, etc. Appearance of these characters is usually attractive, especially for persons of aristocratic descent;

Characters-victims of Bolshevik terror are dressed according to their social status, their physique varies widely and depends on the context of a particular film; the appearance of female characters as a rule are attractive.

Traits characters: cruelty, meanness, sexual obsession, dedication, hostility, cunning, strength (Bolshevist characters); nobility, strength, determination, courage (positive characters - the Whites, aristocrats, immigrants, people of creative professions, intellectuals and so on.). In general, the nature of all the characters of foreign films on a Russian topic is depicted by a dotted line, without going into psychology.

A significant change in the lives of the characters: the destruction peaceful, serene and happy life of the people by the Bolsheviks, the seizure of a ship and the town by them, the massive communist terror (shootings, executions, torture, etc.) against the civilian population, including women;

A problem: the life of the White characters, for that matter, and the existence of the state as a whole are at risk: charming and intelligent life characters who are trying to remain neutral is at risk too...

The search for solution to the problem: this is the struggle of the best representatives of the Russian people - Whites - to the Bolsheviks; there is the emigration of characters from the circle of the White movement in one of the Western countries.

Solution to the problem: there is the conscious of destruction / arrest White characters by Bolsheviks; there is the salvation of the White characters in exile.

The structure of the stereotype image of the White movement in the Western films of 1950s – 1980s

Historical period, the place of action: any period of time from 1918 to 1924, taking into account the presentation of life in exile during this period, it can capture 1920–1950.

Furnishings, household items: there are the modest dwellings, forms and objects of everyday life of the poor characters, neat houses and household items of the rich characters, luxurious furnishings life of the Russian aristocracy and the bourgeoisie before the Bolshevik Revolution. Household items of Bolsheviks are usually shown without much grotesque.

Methods of depicting reality: they are mainly relative to conventionally romantic characters, to some extent related to the White movement and Tsarist Russia.

Characters, their values, ideas, clothes, physique, vocabulary, facial expressions, gestures: Red and White characters are differentiated: on the one hand, they are negative communist characters having inhumane ideas, on the other hand – these are people who defend their principles and ideas of honor, good and evil (the representatives of the White movement or intellectuals who have fallen under the Bolshevik hammer). Characters are shared not only by social, but also material status. Whites are dressed richer the poor Reds. As for the body, there is allowed options - Whites on the screen (depending on the task) are either intellectuals or athletic looking men. These White characters are shown as generally refined and charming man with impeccable manners and refined vocabulary. Red characters, on the contrary, are brutalized, with repulsive looks, gestures and facial expressions of the power and unpleasant voice tones. Characters victims of Bolshevik terror are dressed according to their social status, their physique is varied widely and depends on the context of a particular film; the appearance of female characters are attractive.

A significant change in the lives of the characters: it is the destruction of peaceful, calm and happy life of the people by the Bolsheviks;

A problem: the life of the White characters, for that matter, and the existence of the state as a whole are at risk; charming and intelligent life characters who are trying to remain neutral is at risk too.
The search for solution to the problem: it is the struggle of the best representatives of the Russian people - Whites - to the Bolsheviks; there is the emigration of characters from the circle of the White movement in one of the Western countries.

Solution to the problem: the conscious destruction / arrest White characters by Bolsheviks; there is the salvation of the White characters in exile.

The structure of the stereotype image of the White movement in the Western movies of the 1990s – 2000s

Historical period, the place of action: any period of time from 1918 to 1924 years, taking into account the presentation of life in exile, this period may be extended.

Furnishings, household items: there are the modest dwellings, forms and objects of everyday life of the poor characters, neat houses and household items of the rich characters, luxurious furnishings life aristocracy and bourgeoisie before the Bolshevik revolution. Household items of Bolsheviks are usually shown without much grotesque.

Methods of depicting reality: conventionally romantic (Zoya, 1920. War and Love), realistic (Battle of Warsaw, 1920, Order) with respect to the characters, to some extent related to the White movement.

Characters, their values, ideas, clothes, physique, vocabulary, facial expressions, gestures: In the films of Western countries (Zoya, Doctor Zhivago), all presented as former cinema decades: negative communist characters are the carriers of inhumane ideas (Reds) and the people who defend their principles and ideas of honor, good and evil (the representatives of the White movement or intellectuals who have fallen under the Bolshevik press). Characters are shared not only by social, but also material status, etc.

In the series 1920. War and Love Polish officers and soldiers are charming patriots and Reds are brutalized, often they are with a repulsive appearance and unpleasant voice tones.

In the drama Guards of Riga charming patriots are shown Latvians, but the Russian Whites are failed invaders confused with the Germans.

A significant change in the lives of the characters: Bolsheviks destructed of the peaceful, serene and happy life of the people;

A problem: the life of all the characters, as, indeed, and the existence of the state as a whole are at risk: the lifes of charming and intelligent characters who are trying to remain neutral is at risk too.

The search for solution to the problem (in the Polish-Baltic film version): there the fight of the best representatives of the people with Red troops or Russian Whites.

Solution to the problem (in the Polish-Baltic film version): a victory of patriotic forces over the Red and White danger.

5. Conclusion

Western screen in Soviet times preferred to interpret the topic of the White movement in the genre of melodrama, sympathetically developing the theme of enemy’s exile of Soviet power. This movie about the White movement in 1931-2015 occupied a very modest place in the Western repertoire. So from 1931 to 1991 on Western screens out only 12 films that are at least in part can be attributed to the subject of the White movement: romance Crimson Dawn (USA, 1932), the drama The world and the flesh (US, 1932), drama Heroes of Siberia (Poland, 1936) and Battleship "Sevastopol" (Germany, 1937), a melodrama Knight without armor (US, 1937), Balalaika (USA, 1939), We live (Italy, 1942), Doctor Zhivago (USA, 1965), the drama Nicholas and Alexandra (UK, 1971), The whole life (France-Italy, 1974), Shot of mercy (Germany-France, 1976), The White Guards (UK, 1982).

In the post-Soviet period, interest in the history of the White movement in the West is almost disappeared: the American and English cinema in a quarter century was marked by only two films – melodrama Zoya (US, 1995) and the drama Doctor Zhivago (UK-Germany-USA, 2002).

In the XXI century the topic of civil war was naturally more interested in the country that were included at one time in the part of the Russian Empire. In the movies (Guards of Riga, 1920, War and Love, Battle of Warsaw, 1920) patriotic theme of liberation of the motherland from invaders (both Reds and Whites) was on first place.
Apparently, in the Russian cinema in the nearest years, "balanced" trend images of the Civil War and the White movement will get its further development, while in Eastern Europe and the Baltic's theme of the Civil War, most likely, will be developed in the military-patriotic spirit.

As for the film of CIS countries, here is, as before, the history of the civil war in Russia, probably will be somewhere in the periphery of the repertoire. A screened-scale film about alien and distant Civil is expensive and financially risky. And the image of the enemy – If you need it – you can always dazzle much more cheaply: for example, using a proven period of "cold war" spy mania...

References

Age as a Factor in Evaluation of Media Literacy Levels in Slovakia

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Abstract

Evaluating media literacy levels in Europe involves a full range of socio-demographic indicators. These include age, gender, highest attained level of education, place of residence where the respondent lives, income level and others. Each of these indicators has a specific influence on the level of media literacy. The objective is to investigate the age of respondents as we consider it one of the most important indicators applied in media literacy research. This article is based data from Slovakia generated in a study named Media Literacy of the Adult Population in Slovakia conducted from 2014 to 2015. This representative study was conducted on a sample of 2815 respondents ranging in age from 16 to 83. The article focuses on selected segments of the research data involving statistical age testing as an important socio-demographic indicator of the level of media literacy in the adult population in Slovakia.

The results of the study focused on the level of media literacy of the adult population in Slovakia showed the most significant differences involve age differences. Differences were found across the individual age groups involving traditional and new media, as well as user skills and critical thinking. This is more than a simple generational divide related to digital media as it also involves individual aspects of traditional media, where the level of media competencies and critical thinking appears to decline with age.

Keywords: Media Literacy, Media Education, Slovakia, Research, Media and Information Literacy.

1. Introduction and State of the Art

Media literacy levels in individuals are affected by a host of socio-demographic factors. The most commonly encountered include age, gender, highest attained level of education, income level and place of residence (rural or urban area). Discourse involving the level of media literacy in the context of these socio-demographic indicators is often distilled down in professional sources into studies involving the ability to use information and communication technology, including the usage of online media. The term digital divide is often referenced within this context and the Organisation for Economic Cooperation and Development (OECD) defines this term as “the gap or division between individuals, households economic and geographic areas with different socio-economic levels with regard both to their opportunities to access information and communication technology, and the use of the Internet for a wide variety of activities.” (OECD, 2011: 5).

In recent years, there has been an increasing amount of literature devoted to the specifics of individuals who use the Internet and those who do not (Rice & Katz, 2003; Park, 2012). Vicente &
Lopez [2006] investigated determinants of individual internet use and its intensity of use in 14 European countries; Ono & Zavodny [2007] studied the patterns and determinants of using information and communication technologies in the United States, Sweden and three Asian countries (Japan, South Korea and Singapore). Much of the current literature on the digital divide pays particular attention to qualitative data involving the use of personal computers in the respondents’ households (Daly et al. 2008; Tanton et al., 2009). Other research projects of a similar orientation have focused on indicators involving Internet connectivity (Todman et al. 2009; Harding et al., 2009).

What we know about the relationship between digital divide and socio-demographic factors is largely based on empirical studies involving the scope and intensity of Internet usage by individuals at the local, national or international level. A recent study by Abad [2014] differentiates between three levels of development of digital literacy: digital competence, digital use and digital transformation. “Digital competence involves finding information on the Web, document preparation and processing, electronic communication, creation and manipulation of digital images, using spreadsheets, creating presentations, web publishing, creating and using databases, digital and interactive games, production of multimedia objects and the dominion of digital learning environments. Digital use involves the successful use of digital skills in life situations, the proper application of digital competence in the specific profession or in specific contexts, giving rise to a corpus of specific digital uses for an individual, group or organization. Digital transformation is to be able to make those digital applications that have been developed permit and enable innovation and creativity and encourage significant changes within the professional or knowledge areas, or in the personal or social context.” (Abad, 2014: 177).

The digital divide is often referenced in this context in connection with inter-generational differences. Members of the individual generation groups have different internal motivations for using new technologies; they are also exposed to different forms and intensities of pressure from their external social environments related to the need for more or less intensive adaptation to new technological and media trends. The elimination of inter-generational inequalities in the usage of digital media is one of the objectives of the Digital Europe Vision 2020 document from the European Union, which is to “allow our societies to meet the new challenges of an ageing population.” (Digital Europe, 2009: 44). Age, as an important factor affecting the potential social exclusion of an individual, cannot be simply restricted to questions concerning digital technologies and the digital economy. Media and information literacy are an important context in which these inter-generational differences should be examined. A person who is media and information literate is not just a person who has attained a specific level of knowledge about the contents of such information or media or someone who is able to apply critical thinking to the contents of such information and media statements. “These elements are an important component of a broader understanding of these literacy skills but are not an important outcome in and of themselves; education in the area of media and information literacy should include soft skills that improve our ability to make the right decisions in a broad spectrum of situations, in particular those that are directly or indirectly related to the use of individual information sources or media.” (Vrabec, 2013: 162).

However, approaches of this kind are riddled with various limitations. One such limitation is how to classify concepts such as media and information literacy within traditional media. Mareš & Woodart [2006] analysed the data from numerous studies that investigated individual generations during various stages of life. An example connected to traditional media was the determination that the quantity of daily television consumption had an impact on individual development processes related to health, changes in social status, changes in career prospects and other differences between individual generations. In terms of content preferences, the authors decided that there was a relationship between social role and psychological development correlated to age differences between the individual members of the population.

“At the beginning of the 21st century, media education in advanced countries is now conducted on a mass scale, supported by the serious theoretical and methodological research.” (Fedorov, 2014: 185). An empirical study as to how media competencies develop among the individual age groups would be particular apt within this context. Such competencies may be considered a more or less comprehensive set of knowledge and skills that represent the highest level of media literacy. “A media-competent individual is able to actively select relevant content
from a range of media options, differentiate their interests from the interests of the media owners and are able to critically examine media contents and the information they provide. In addition, a media-competent individual is able to create media content and messages, has an increased level of awareness of the effects media has on culture, tastes and consumer behaviour, perception and the way that free time is used. Media competencies help people orient themselves in a flood of information that they receive through media and information channels, help them in form their own opinions about this information, form and opinion about such information and expose and resolve problems that arise from their contact with media.” (Petranová, 2013: 16). From this perspective, media competencies can be studied across the individual generations, while various methods and concepts have been used to evaluate media literacy levels in individuals.

2. Materials and methods

Numerous international organisation (the European Commission, UNESCO, OECD, Council of Europe and others) have progressively adopted a series of recommendations and guidelines that emphasise the importance of media literacy as an important competency for life in modern society. Some of these recommendations have been transposed into Slovak law. One of them is Directive 2007/65/EC of the European Parliament and of the Council of 11 December 2007 (Directive, 2007). This Directive defines the notification duty that all EU Member States share with respect to the level of media literacy. On the basis of this Directive, Slovakia (as well as other EU countries) is obliged to file an evaluation report with the European Commission on a regular basis on the current condition and level of media literacy.

There is a relatively broad level of diversity in approaches to measuring and evaluating media literacy among individuals, which results in a lack of unified terminology and the relatively vague nature of the tools that are used, which ultimately manifests in difficulty in making decisions regarding their application and usage. The Testing and Refining Criteria to Assess Media Literacy Levels study (Celot & Pedersen et al., 2011), which represents a relatively targeted overview of the contexts and skills associated with media literacy, is one of the most consistent approaches in a European context. The document builds and expounds on the theses and concepts formulated in the Study on Assessment Criteria for Media Literacy Levels (Celot & Pérez-Tornero, 2009). The primary objective of this study was to propose potential criteria and indicators for evaluating the level of media literacy in Europe. The result of this endeavour is a reference framework that includes individual competencies and environmental factors in the area of media.

Pilot verification of this survey concept was conducted in six EU countries (Denmark, France, Great Britain, Hungary, Italy, Lithuania and Poland). A questionnaire was developed on the basis of the three proposed individual competency criteria (i.e. user skills, critical understanding and communication skills) with 38 subordinate indicators of individual competencies (e.g. computer and Internet skills). Given that Slovakia was not among the countries participating in 2010, the decision was made in 2014 to adapt and implement this reference strategy in Slovakia. A translation of the original questionnaire was used in conducting this study along with 9 uniquely formulated questions added to the original questionnaire. The final questionnaire contained 91 questions divided into 16 topical blocks.

A representative study was conducted on a sample of 2815 respondents aged 16 to 83, with data collection occurring in all of Slovakia’s individual regions. The following socio-demographic characteristics of respondents: age, gender, education, region, size of place of residence and household income, were considered in constructing the study sample. Paper and pencil interviewing (PAPI) was conducted to collect study data with more than 200 trained surveyors used to physically record the answers of respondents onto the record sheets. Study data was collected from March until June 2014. Statistical evaluation of the results was then completed in IBM SPSS, with data analysis and statistical testing of the defined hypotheses conducted using contingency tables and Pearson’s chi-squared test.

The goal of the study was to obtain an analytical overview of the current level and trends in media literacy of the adult population in Slovakia, and in particular to answer study questions involving content, context and competency aspects of media use among the adult population in Slovakia. Detailed study results are published in a separate study report (Petranová & Vrabec, 2015). The article only focuses on selected segments of the research data involving age as an
important socio-demographic indicator and its relation to the level of media literacy in the adult population in Slovakia.

3. Discussion

One of the goals of the study was to determine frequency formulas for the usage of media by adult users. Their levels of popularity were then abstracted from these findings. Study results confirmed the dominant position of television, which remains the most popular channel for media content among the target audience in Slovakia. Up to 68.8% of the adult Slovak population watches television every day or nearly every day. The share of respondents who reported never watching television was only 2.5%. Those with the highest levels in the television audience include seniors (85.4%), i.e. those over the age of 64, and those aged 55 to 63 (79.4%). The lowest frequency of daily viewership was on the other side of the spectrum, among respondents aged 16 to 24. A similar trend was confirmed in the study of media literacy in 6 EU countries (Celot & Pedersen et al., 2011), where seniors had the highest audience levels (95%) with the lowest level among young people up to 24 (75%). The findings with respect to radio are also interesting, with major differences noted across the individual age groups. The least regular listeners (49.2%) were in the youngest age category (16–24). This medium is most popular among middle-aged adults (45–54).

The study demonstrated a direct relation between declining age among respondents and the share of regular readers of magazines and newspapers. The highest levels of respondents reporting daily or near-daily readership of print media was among seniors, i.e. those over the age of 65 (43.7% of respondents). The share of respondents interested in information from newspapers and magazines is directly proportional to the age of respondents. The least regular readers (19.5%) were in the youngest age category (16 – 24). Similar trends involving the readership structures of periodicals were noted in the data from the European study of media literacy levels of the adult population, where the share of regular readers was slightly higher than that in Slovakia (reaching an average of 33%), while containing similar patterns when evaluating the data in terms of socio-demographic indicators, including the age of the respondents.

The percentage of those using the Internet is inversely proportional to the age of respondents. Those respondents online the most were in the youngest age category (81.5%) and young adults aged 25–34 (71.6%). Seniors, on the other side of the age spectrum, who were daily users of hardwired Internet service were few and far between (9.1%). Another trend noted in the data was that the number of mobile Internet users also decreased as the respondents got older. Only 5.5% of the senior population reported using mobile Internet service. Findings related to the use of digital games were not surprising, with the highest share among the youngest respondents aged 16 to 24 (28.3% reported regularly playing digital games). The share of gamers in this age category was up to 39% in the study conducted in EU countries and referenced above. The age of digital game players drops proportionally with an increase in age according to the study participants in Slovakia, with the lowest level recorded among the senior population (3.4% of respondents).

The study also produced data that was subsequently evaluated in terms of the use of a mobile phone for personal communication. The study showed that seniors used mobile technology the least (45.1%), followed by those aged 55 to 64 (74%). The youngest residents of Slovakia are just with opposite, with 91.3% of those aged 16 to 24 and 87% of those 25 to 34 reporting daily usage of their mobile phones.

Age differences exist in the perceived reliability or unreliability of specific media across the age spectrum. The highest level of confidence in traditional media was expressed by the oldest generation, with nearly half of those surveyed expressing confidence in television, radio and newspapers. Seniors had the least confidence in information from the Internet (11.2%) among all the age groups. Adults in Slovakia aged 35 to 44 had the greatest doubts as to the reliability of television news. Respondents were posed a series of questions to map their opinions and reactions to different forms of presentation of the same events by different media. The answers were then evaluated and divided into several thematic categories. The first item includes those respondents who noted that there were no differences in the media presentations of identical events. Complete disregard and indifference as a reaction to different perspectives or ways of presenting the facts were noted in 43.2% of respondents. A most interesting finding is that disregard and indifference were most widespread among the youngest (42.4%) and the oldest categories of respondents.
The same occurs least among young adults aged 25 to 34, with 37.2% of respondents reporting this opinion. The evaluation of this portion of the questionnaire indicates that a relatively large number of public is at least implicitly aware that media organisations work with specific interpretative frameworks influenced by a number of factors. These factors may be external in nature (political, economic, cultural and other influences on the work of media) or internal influences related to the interests, opinions, routines, stereotypes and other factors inside the media organisation.

There is no direct connection or relation among the popularity of a specific media and its perception as a reliable and authentic source of information among a relatively large share of the adult population in Slovakia. A most interesting finding is that disregard and indifference with regard to the different ways in which identical events were handled by various media were most widespread among the youngest (42.4%) and the oldest categories of respondents (53%). The same occurs among young adults aged 25 to 34, with 37.2% of those asked reporting this same opinion.

Focus within the study was also devoted to determining if the respondents applied a strategy to compare information that seemed disputable or misleading to them with other sources of information. 45.9% of all respondents applied such a procedure. Such a procedure was most common among young people, including those aged 16 to 24 (50.5%) and aged 25 to 34 (50.1%). The level of initiative to compare different sources of information was much lower among seniors (31.4%) and working adults aged 45 to 54 (31.2%).

Efforts were made to determine if adults in Slovakia were able to identify media texts as a specific type of social construct of reality created and presented for a specific purpose. The related question in the questionnaire sought to determine if this connection would be clear in the study sample. A surprising finding was noted in terms of the age structure of respondents in Slovakia who answered this question. For instance, the youngest segment of Slovakia’s adult population was most sensitive to the presence of violent elements in media content, specifically respondents 16 – 24 (70.8%) and respondents 25 – 34 (71.2%). Seniors (64+) came out on the other side of the spectrum, with only 50.6% of those asked cognisant of the differences between the media’s representation of reality and objective reality.

One of the questions involved the awareness of the presence of marketing elements in media content. The finding that the fewest respondents aware of the presence of marketing elements in media content occurred in the oldest age group (34.1%) is important. This is extraordinarily low in comparison with the average in the other monitored EU countries, where this indicator was up to 72% among seniors. This means that Slovak seniors have a very low level of awareness of what constitutes a marketing element in media content. This fact highlights the need for educational activities focused on increasing the awareness among the senior population to various types of persuasive actions, including advertising, tele-shopping, direct mailings and other marketing activities that are found across the individual types of media.

The finding that up to 72.3% of respondents demonstrated the ability to recognise basic content and formal aspects of advertising and ad messages is also interesting. Another finding within the evaluation of answers in terms of the age composition of respondents was that seniors have the greatest problem in differentiating between commercial and non-commercial information, with only 56.4% of them stating that they have this ability. The average number of positive answers was 76% in the case of seniors from other countries. Analysis of the responses from Slovak respondents showed that all age categories are aware of the existence of rules regarding the placement of advertising (positive response levels ranging from 71.5% to 79.9%). The sole exception, once again, is older members of the population, with only 44.5% of those aged 65 to 83 answering in the affirmative, followed by 66.9% of respondents aged 55 to 64. Compared to the study conducted in the EU, this is an important finding as local seniors demonstrated the highest level of awareness of the existence of advertising placement rules (77% responded affirmatively) among all respondents.

The most experience involving the creation of information and media content is possessed by young people aged 16 to 24 (30.4%) and young adults aged 25 to 34 (25.3%). This finding is not as surprising as young adults often use social networks through which they can easily create and immediately publish their opinions and commentary along with other types of information content.
The number of individuals with experience involving the creation of information content intended for sharing with others decreases as the age of respondents increases.

Respondents were asked in the questionnaire to try and evaluate their user skills in relation to information technologies and the Internet. Up to 76.9% of the study respondents stated that they had the computer and Internet skills needed to communicate with loved ones, friends, colleagues and other circles of acquaintances. Only 11.2% evaluated their own skills as lacking. The youngest group involved in the study had the highest level of self-evaluated ICT skills (approximately 92% of respondents). Conversely, the senior population expressed the least confidence in their own ability to communicate using the Internet (18.7%).

The forms of information and communication activities the respondents preferred and the extent to which they are used were of interest in the study. The data documents that the three most preferred approaches in this area are: searching for information on goods and services (72.8%); email communication (77.2%); the use of social networks such as Facebook, Twitter, etc. (59.7%). Age is an important factor affecting the engagement of adults in information and communication activities. The level of engagement decreases in a direct relationship with an increase in age. For instance, 88.8% of the youngest respondents and 87.4% of young adults use the Internet to search for information about goods and services. This level is only 60.5% of those aged 55 to 64 and drops to 24.8% among the oldest respondents.

Verifying information from various sources is critical in terms of media literacy. Study respondents were asked about their standard habits and practices when visiting websites. The most common strategy involves the site visitors themselves considering if the information presented on the site or other information sources correspond to their previous experiences. Such a process is employed by 61.2% of adults in Slovakia. Other strategies used to verify the trustworthiness of websites or other sources accessible online were in the minority. Only 38.4% of the total number of respondents verified questionable information on other websites. It is interesting that the verification of questionable information from other sources is most widespread (49.3%) among young adults (25 to 34) and respondents aged 16 to 24 (46.4%). The share of people who verify information from other sources dramatically decreases with an increase in age, falling to 26% among those aged 55 to 64 and only 8.2% among seniors. This is a very low level and may explain why older people can so easily become victims of persuasive media activities, manipulation and propaganda, as well as various types of fraudulent activities that seek enrichment at the expense of seniors.

4. Results
The principles of inductive statistics were used for the purposes of ensuring a systematic, transparent and logical configuration, analysis and generalisation of the obtained data. Pearson's chi-squared test of goodness of fit was selected for statistical testing of the selected hypotheses; the test is based on frequency tables and tests against the null statistical hypothesis. This assumes that the frequencies in the individual categories are equal to the expected (theoretical) frequencies. Two contradictory hypotheses are placed against one another during testing. The hypothesis to be verified is called the null hypothesis. The alternative hypothesis is positioned against the null hypothesis. The null hypothesis typically states that the variables in the population that are subject to testing are independent of one another and there are no statistically significant differences between the different socio-demographic groups in the population. The alternative hypothesis, conversely, assumes the presence of statistically significant differences and therefore that the investigated variables in the basic data set are dependent.

Statistical hypothesis testing is conducted for all of the monitored socio-demographic indicators included in the study. Details are provided in the study report. This article focuses on the results of statistical testing of hypotheses related to the age of respondents. A total of 58 statistical hypotheses were tested with respect to this parameter. The alternative hypothesis was confirmed in 54 cases, with the null hypothesis confirmed in only 4 cases. These findings may be illustrated for the first question that was used to determine if there is a significant relationship between the age of respondents and the frequency of their consumption of different types of media. Statistical testing showed that such a relationship clearly exists, which means that different age groups consume individual media with different frequencies, and these differences are statistically significant. At a
level of significance of 0.05, the alternative hypothesis was also accepted, which stated that the share of respondents considering individual media completely or nearly reliable sources of information differs in the individual age categories.

The null hypothesis was accepted in four cases. The first involved the questionnaire item that determined how respondents react when they observe identical information presented differently in different media. The respondents were told to select one of six potential reactions. The fifth option confirmed that the given potential reactions differed in a significant statistical manner across different age groups. The analysed data was not statistically significant in the case of the “I ask my friends, family members or other people their opinions” item. This result indicates that there is no statistically significant connection in the adult Slovak population between the age of respondents and the sharing of doubts concerning media content in social groups.

The second confirmed null hypothesis involved the items that were used to determine if there were differences in opinion with respect to the media’s presentation of the human body among people of different ages. An attempt was made to determine the extent to which the adult Slovak population is aware of the ability of the media to depict the body in an intentionally modified manner (e.g. photos in magazines that have been modified using Adobe Photoshop, faces and bodies of that have undergone plastic surgery, etc.). At the same time, an effort was made to determine if respondents were aware that media are able to create exaggerated expectations and aspirations among the public with respect to physical appearance. 60.9% of respondents identified with the “Having such a body is not natural” statement when consuming some media content, but no statistically significant differences in the opinions of respondents on this specific topic were identified in terms of age.

A portion of the study asked study sample if they ever responded to a civil or social problem using any form of media (e.g. the Internet). The following forms of expressing their opinion were prompted: (a) using a blog, making a comment or leaving a status on a social network; (b) signing a petition; (c) participating in a public gathering; (d) contacting a politician or political party. The alternative statistical hypothesis was confirmed in the case of the first three options, indicating that these forms of expression regarding a civil or social problem are represented differently across the different age groups. No significant connection was found between age and expression an opinion by contacting a politician or a political party.

The final confirmed null statistical hypothesis involved a question within which the respondents were asked about the way they typically become aware of the websites they visit. For instance, if they find the sites themselves, if they come recommended or a combination of the two. The analysed data was determined to not be statistically significant, whereby the null hypothesis was accepted at a level of significance of 0.05, indicating that there is no significant connection between age and the way in which respondents choose websites.

5. Conclusion

The results of the study focused on the level of media literacy of the adult population in Slovakia showed the most significant differences involve age differences. Differences were found across the individual age groups involving traditional and new media, as well as user skills and critical thinking. This is more than a simple generational divide related to digital media as it also involves individual aspects of traditional media, where the level of media competencies and critical thinking appears to decline with age. For this reason, increased attention and efforts must be devoted to a broad spectrum of informal educational activities focused on seniors and people during their post-working years. “Media education for seniors should primarily concern preventing this generation from lagging behind, social exclusion and the protection of vulnerable groups. Its objective should be refreshing the abilities and skills of individuals in connection with the development of media, new communication technologies and communication systems.” (Petranová, 2013: 17). A suitable solution might include expanding the range of television and radio programs focused on increasing the media literacy of these target groups. This is a challenge, in particular for public media, which should provide properly conceived programs focused on the development of media competencies to their audiences and listeners.

“Media education represents an educational process in our understanding, within which individuals acquire media literacy or their media literacy is developed. Media literacy is the result
of media education and composes a set of learned (acquired) basic skills that permit conscious and responsible treatment of the media and their products” (Kačinová, 2012: 35). An important recommendation in the field of improving media literacy is the gradual expansion of the range of informal educational activities for all ages and social groups in the population. Media education is absolutely not reserved exclusively for children and youth. It has an irreplaceable position in the education of parents, people who work with youths, representatives of the NGO sector, disadvantaged groups and others. These educational activities must be attractive enough and respect the uniqueness and the needs of the individual target groups. By no means do these activities have to be conducted in the form of traditional seminars and training activities. Modern online solutions may be used to eliminate the need for travel, to provide time flexibility and to gain access to a much broader spectrum of potential interested parties.

References


Conceptual Challenges in Designing Measures for Media Literacy Studies

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Abstract

The analysis of the existing conceptualizations in the media literacy literature reported in this article revealed that there are considerable gaps in the media literacy literature. While there are many definitions of media literacy, the existing definitions typically cluster around highlighting several components, especially skills and knowledge but also behaviors and affects. To a lesser extent there is a clustering around certain domains of skills and particular domains of knowledge. But at this point the conceptualizations stop providing detail, and this inadequate degree of specificity in the explication of media literacy requires researchers to fill in conceptual gaps in order to design their measures. The gaps have resulted in the design of a great many measures of questionable validity, which sets up a vicious cycle. Researchers who want to design a test of media literacy go to the literature for guidance, however that literature shows them an overwhelming choice of definitions with no single definition being regarded as the most useful one. Even more problematic is that none of the many definitions provides enough detail to guide researchers very far through the process of designing measures of media literacy. Until more fully explicated definitions of media literacy are offered to scholars, researchers will be left with little guidance, which will result in the continuation of inadequate conceptual foundations for their empirical studies and therefore a fuzzy and incomplete foundation to use as a standard for judging the validity of their measures.

Keywords: media literacy interventions, designing measures, validity, scholars, researchers, media, studies.

1. Introduction

While there is a large and growing literature that tests the effectiveness of media literacy interventions, there is reason to be skeptical about the value of the findings in that literature because of problems with the validity of the measures used in those studies (Potter & Thai, 2016).

In this essay, we analyze the problems found in that content analysis of the media literacy intervention literature then focus attention on how measures of media literacy can be constructed in order to exhibit a higher degree of content and face validity. We present recommendations about how to handle eight measurement issues in three categories: Measuring skills, measuring knowledge, and macro measurement issues.

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2. Materials and methods
Analyzing Problems with Measuring Media Literacy

To create a basis for analyzing problems with measuring media literacy, we first have to clarify what validity is. Next we report the measurement practices we found in our content analysis of the media literacy intervention literature, which reveals some troubling patterns. Then we demonstrate that many of these measurement problems can be traced to the nature of definitional guidance in the broader media literacy literature.

Validity. Validity is the most fundamental criterion for judging the quality of measures in social science research (Brinberg & McGrath, 1985; Guilford, 1954; Nunnally, 1967; Rust & Golombok, 1989). As Chaffee (1991) writes, "Validity should not be equated with 'truth.' Disappointing as this might sound, the philosophical concept of truth is not a usable criterion" (p. 11). Instead, the criterion for judging validity within a research study is the meaning expressed by the authors of that study. "The question of validity is a question of 'goodness of fit' between what the researcher has defined as a characteristic of a phenomenon and what he or she is reporting in the language of measurement" (Williams, 1986: 21). Thus the standard for judging validity comes from the results of a meaning analysis, that is, analyzing the meanings that authors provide for their focal concepts.

There are two general kinds of validity – the logical/conceptual type and the empirical type (Babbie, 1992). The logical/conceptual type of validity is established through argumentation and expert judgments, while the empirical type relies on collecting data to show support for expectations about what the concept should (predictive and concurrent) and should not (discriminant) be related to. In our content analysis, we focused on two types of logical/conceptual validity – content validity and face validity – by examining how the authors of those studies conceptualized media literacy then comparing those authors' conceptualizations to the measures they used.

Content validity. Content validity focuses on the structure of the concept and is concerned with the degree to which the items used by researchers in their measurement set match the configuration of components in their presented definition of the concept. Bausell (1986) illustrates the essence of content validity with the question, "Do the different components of the measurement procedure (which are usually items) match the different constituents of the attribute being measured?" (p. 156). Those items need to be representative of the entire subject (Vogt, 2005).

What are the components of media literacy definitions? Scholars have provided many different definitions of media literacy (for a sampling see Table 1). Two components – knowledge and skills – appear most prevalently but there are also other components of behaviors, affects, and beliefs. Notice that within each of these components there is a variety of domains (see Table 1 for a sampling of definitions). For example, skills is a broad component that includes domains of accessing, interpreting, and producing media messages. The knowledge component has domains for information about the media industries, media content, media effects, and one’s self. A category scheme of components and domains is a useful template in making a determination about content validity, that is, authors who specify certain components and domains in their definitions of media literacy should then be expected to provide measures for each of those specified components and domains. To illustrate, let’s say that an author defines media literacy in terms of skills (e.g., evaluation and production) and knowledge (e.g., industry motives and character stereotypes). If that author measures skill with only one domain (such as evaluation but not production) and knowledge with only one domain (such as character stereotypes but not industry motives), then this leads to a judgment of faulty content validity, because this author failed to measure the full set of components/domains specified in the conceptual definition. The judgment of content validity then is the comparison of the configuration of components and domains in authors’ conceptualization of media literacy with their set of measures.

Consider the situation where authors provide a definition of media literacy that includes several components and many domains. These authors might decide that using a full set of measures to address all the components/domains would place too high a burden on their research participants, so the authors select a sub-set of components/domains to measure. If these authors provide a clear rationale for the sub-set, then they narrow the scope of their definition in a scholarly manner and thus preserve the correspondence between their conceptual foundation and
their set of measures. However, if the authors fail to provide a rationale for the narrowing of the definition, then the judgment of content validity must be based on the comparison of sub-set of measures with the full definition, and thus the resulting judgment is that there is low content validity.

Face validity. Face validity requires a judgment about whether the measures are acceptable operationalizations of the ideas described in the definition. Thus, when authors provide a measure that matches the component/domain they claim it to be, there is a match on face validity. To illustrate a non-match, let's say that authors define media literacy with the skill component and a domain of critical thinking. In the methods section the authors say their measure of critical thinking consists of one item (I am confident about my ability to think critically about media messages) and a five point Likert type set of responses (1 = Strongly Agree, 2 = Agree, 3 = Neither Agree nor Disagree, 4 = Disagree, 5 = Strongly Disagree). When we compare this conceptualization to the measure, we can see a non-match, because the measure represents a belief component rather than a skills component, that is, the measure taps into the degree to which respondents believe they have critical thinking abilities instead of assessing their performance level on this skill. As a second example of a non-match, let's say the measure of critical thinking consists of a question (How often do you think critically when encountering media messages?) and respondents are presented with answer choices (1 = Never, 2 = Seldom, 3 = About Half the Time, 4 = Almost Always, 5 = Always). This reveals a non-match because the measure represents a behavior component rather than a skills component.

3. Discussion
Patterns in the Literature
The patterns we found in our content analysis indicate serious problems with content and face validity. Across these 88 studies of media literacy intervention studies, authors of 22 of those studies (25%) provided no definition for media literacy, so it was not possible to make a judgment about validity, that is, it was impossible to compare measures to a conceptual foundation when no definition was provided. Of the 66 studies that did present a definition for media literacy, the authors of 45 (68.2 %) studies presented their own definition of media literacy. Therefore, only 21 (23.9 %) of those 88 studies used an existing definition of media literacy from the literature as the foundation for their study.

Of the 66 studies that presented a definition of media literacy, 53 (80.3 %) displayed significant problems with content and face validity. With content validity, there were many instances where authors would highlight a particular component or domain in their definitions but then provide no measures of that specified component or domain. For example, 59 studies presented a definition that included a skills component, but only 22 of those studies (37.3 %) presented a measure for any type of skill.

With face validity, there were many non-matches, because authors mis-attributed their measures. For example, with the 22 studies that said they provided measures for some sort of skill, only 12 actually measured a skill. These non-matches on skills were due to measures reflecting a belief component (I have confidence in my skills) or a behavior component (I typically analyze media messages) rather than the expected skills component. Non-matches were also common within the knowledge component where measures were often more about attitudes than they were assessments of what participants actually knew. For example, asking respondents to use a Likert intensity scale to react to a statement such as "The media industries are too concentrated" generates data about respondents’ attitudes about the issue of ownership instead of their knowledge of facts about the issue.

Definitional Guidance
Recall from the previous section that only 21 (23.9 %) of the 88 studies analyzed did authors use a definition for media literacy as a foundation for their study. Of the rest of the studies, 37.5 % presented no awareness of any definition of media literacy in the existing literature; 38.6 % showed awareness of definitions but rejected them all, preferring instead to present their own definition. This raises a question about how useful the existing definitions are to designers of media literacy intervention studies.

In order for definitions of concepts to be useful to designers of empirical studies, those definitions need a good degree of clarity and detail – or what Chaffee (1991) calls explication.
Chaffee has argued that many concepts in communication research have not been well explicated so they have limited utility in forming a strong conceptual foundation for research studies. He explains that well explicated concepts meet the criteria of invariance of usage and specificity. Let's examine both of these criteria in relation to media literacy.

Invariance of usage. Chaffee (1991) argues that when researchers share a clear meaning of a concept, they can better generate a literature where measures are replicated across studies so that over time the definitional elements that are ambiguous can be clarified, and those definitional elements that are found to be faulty can be eliminated.

There are a great many meanings articulated for media literacy (Buckingham, 2003; Hobbs, 1998; Potter, 2009, 2010; Silverblatt, Ferry, & Finan, 2014; Tyner, 2009). One reason for this is that this literature is very large. A search of Google Scholar using "media literacy" as a keyword yields over 1.5 million hits of published books and articles on this topic. Another reason for the multiplicity of meanings is because those meanings have been produced by a wide range of scholars from different backgrounds (communication, psychology, education, public health, and advertising) and with different agendas (political action groups, consumer protection groups, public school systems, and governmental agencies from around the world).

4. Results

Specificity. Concepts that are presented in more detail provide a more fully articulated meaning and thereby provide more guidance to researchers as they design measures of that concept. Specificity refers to the degree to which authors provide detail when defining their concepts. When we analyze the definitions in the media literacy literature, we can see several layers of detail provided by definers of the concept. One layer of detail specifies different components, such as skills, knowledge, behaviors, and affects (see Table 1). This is a useful layer of detail to researchers because it delineates the need for different types of measures, that is, measuring a skill requires a different type of measure than assessing knowledge. Notice that many of these definitions provide another layer of detail by specifying domains within components. For example, some authors who specify the component of skills in their definition of media literacy provide more detail about which skills in the form of skills domains, such as accessing, interpreting, and producing. The knowledge component also displays some domain detail.

It is useful to think of the arrangement of definitional detail in a pyramid structure with the most general definitions of media literacy existing at the apex (see Figure 1). As we move down the pyramid toward the base, we encounter definitions of elements that are greater in specificity but narrower in scope than a general, all-encompassing definition. Think of the base of the pyramid as the individual measures. When researchers are designing their measures they start at the apex with the general umbrella type definition and work their way through each layer of detail down to the base. When this path through the layers of detail is complete, designers are provided with a fully articulated path guidance that makes the design task relatively easy. However, when layers of detail are missing, the challenge grows larger as designers must fill in the gaps with assumptions – either consciously or unconsciously. To the extent that these assumptions are made unconsciously, they fail to generate a scholarly treatment and this can lead to a greater lack of face validity because the gap between expressed meaning and the measures intended to capture that meaning grows larger.

When we look at the definitional elements for media literacy presented in Table 1 and consider how they would fit into the pyramid in Figure 1, we can see that there is a fair amount of guidance for at least three levels – general definitions, major components, and domains within those major components. However, there are layers that are left largely unaddressed. These layers suggest conceptual issues that need to be considered when explicating the meanings of media literacy.

In the remaining sections of this article, we illuminate eight issues that need to be addressed – three issues about measuring skills, three issues about measuring knowledge, and two issues about measuring media literacy more generally. By presenting these issues, our intention is not to recommend one particular position on each issue. Instead we illuminate the various positions that can be taken on each issue and discuss their implications for measurement. Our purpose is to stimulate thinking and discussion so that these issues can be elevated from the unconscious level of unaddressed assumptions to a conscious level where scholars will start debating the various merits of different positions on each issue. Such a discussion will serve to provide more guidance to
designers of various measures of media literacy. Then when future researchers design media literacy intervention studies, they will have more guidance to provide a more elaborate articulation of their meaning of media literacy and this will provide a stronger foundation for making judgments about the validity of their measures.

Measuring Skills

There are three issues that have been largely ignored or under-developed within the skills component. When researchers design their measures for media literacy skills, they must deal with all three of these issues. The more they are aware of these issues and their measurement options, the more they can design their measures with a higher degree of precision. These are the issues of specifying domains of skills, distinguishing between skills and competencies, and distinguishing between broad skills and skills that are special to media literacy.

Domains of Skills

Almost every conceptualization of media literacy suggests a skills component. Also, a high percentage of empirical tests of media literacy claim to deal with at least one skill. In our content analysis of the media literacy intervention literature, we found that 59 (89.4%) of the 66 published studies that provided a media literacy conceptual foundation, featured a skills component in their definitions.

The depth of treatment of skills can be assessed by comparing the definitions of skills presented by authors to a four level scheme depending on how much detail authors present when talking about media literacy skills. At the most general level, authors make a claim that skills are important to media literacy but they do not mention what those skills are (c.f., Alliance for a Media Literate America; Speech Communication Association, 1996, Standard 23). A second, and more detailed level, is reached when authors articulate what those skills are by mentioning specific skills (such as a particular kind of ability, typically accessing information, interpreting messages, or producing messages). A third level of depth is exhibited when scholars present their list of skills as a set, which leaves designers with the impression that the mentioned skills are more than suggested examples but constitute the complete list. For example, the often cited conceptualization by The National Leadership Conference on Media Literacy specifies four domains of skills “decode, evaluate, analyze, and produce both print and electronic media” (Aufderheide, 1993: 79). And a fourth layer of depth is when scholars take an additional step beyond presenting a set of skills and also offer definitions for each of those skills. To date there is only one example of this in the literature. Potter (2004) specifies seven skills in the domains of analysis, evaluation, classification, induction, deduction, synthesis, and abstraction (see Table 2).

When designers of media literacy intervention studies look for guidance in the literature, they are likely to see a big drop-off in the number of studies as they move from the first to the fourth level of depth. And this pattern leaves designers with little guidance, such that they must fill in the gaps with their own definitions, which can result in definitional fragmentation. Even more troublesome is when designers rely on a definition of media literacy that calls for skills and names some skills, but then does not define those skills, leaving researchers to assume the meaning of those skills for themselves. An illustration of this is with the use of the term "critical thinking." While many scholars use this term, few define it. It is difficult to infer what those scholars who do not define it mean, but it appears that they exhibit a range of meanings. Some of these scholars seem to mean the ability to perceive more elements in media messages, which is really the skill of analysis, while other scholars seem to mean the ability to evaluate messages to uncover their faulty or exploitative nature. Some scholars seem to mean the ability to construct one's own meaning even when it is counter to the intention of the message designers, while others mean the ability to argue against intended meanings, and still others mean achieving a habit of being mindful during media exposures rather than allowing one's mind to continue on automatic pilot. Although we do not argue that one of these meanings is better than others, we do argue that scholars who contend that skills are an essential part of media literacy need to do more than simply name a skill and assume that all readers will share the same meaning.

The current state of ambiguity over defining critical thinking has led researchers to operationalize it in a variety of ways, many of which fall outside the boundaries of what could be considered a measurement of a skill. For example, operationalizing a skill by posing a question that asks respondents how confident they are in their ability to critically analyze media messages, is more a measure of belief than of level of skill. Operationalizing a skill with a question that asks
respondents how important is it that they critically analyze media messages, is more a measure of motivation than of skill level. And asking respondents how often do they critically analyze media messages, is more a measure of recall of behavior than it is a measure of skill level.

Perhaps the most significant problem with defining media literacy as critical analysis arises when researchers measure it as an attitude. For example, consider a study where researchers design an intervention that attempts to persuade teenage participants to avoid using alcohol by teaching them about the health risks and the criminal penalties. They design attitude items to measure the degree to which their participants are persuaded that alcohol use is not an acceptable behavior while they are teenagers. If the authors frame their research as a persuasion study, then the attitude outcome measures could be judged as valid. That is, researchers look for changes in the direction and magnitude of attitude scores between pre-intervention and post-intervention so that they can assess the degree of persuasiveness of the intervention. However, if the authors frame their study as a media literacy intervention study where their intention is to teach their participants to think for themselves and not accept claims made by authorities, then a pattern of thinking for one’s self is not evidenced by participants’ converging toward a shared attitude that demonstrates widespread acceptance of the authority position taught in the intervention. If "critical thinking" implies that people need to think for themselves instead of simply accepting what they are told, then accepting the attitudes that the media literacy intervention is teaching respondents represents uncritical persuasion rather than critical thinking.

Implications for measurement. When scholars specify one or more skill domains but leave those skills undefined, they leave a gap that must be filled by researchers who are forced to make their own assumptions to fill the gap. If scholars who attempt to define media literacy through a skills domain begin to provide more detail about their component’s domains, then designers of skills measures will have more guidance. This additional level of detail can also help reviewers and readers understand more clearly the researchers' intentions and thereby make better evaluations about the measures’ face validity.

Finally, scholars need to think of skills in terms of performance, and researchers need to measure skills by observing the actual performance of their participants. In the athletic realm, basketball coaches do not ask prospective players: How well do you shoot free throws? (very good, good, average, below average). Instead they observe the level of their performance. While determining the level of basketball players’ free throw skill is relatively easy, determining the level of media literacy skills is much more challenging. However, researchers can begin working on this challenge by using a three step procedure. First, they need to clarify as much as possible what the skill is. Second, they need to think about what the various levels of performance are on the skill, then determine what observables would indicate performance at each level. And third, they need to think about the skill as requiring a sequence of sub-tasks, then design measures to track participants through the process of applying that skill in order to identify how far (and how well) each participant has moved through that process of performing the skills.

Skills or Competencies

It is useful to make a distinction between skills and competencies. Competencies are relatively dichotomous, that is, either people are able to do something or they are not able (Potter, 2004). For example, people either know how to use a remote control device (RCD) to turn on their TV or they do not; they either know how to send someone a text message on a smart phone or they do not; and they either know how to recognize a word and match its meaning to a memorized denoted meaning or they do not. Competencies are relatively easy to learn, then once learned, they are applied automatically over and over again. Once a person has a competency, further practice makes almost no difference in the quality of their performance.

Skills, in contrast, are tools that people develop through practice. The ability to perform skills should not be regarded as dichotomous; instead skills exist along a wide continuum from novice to expert. People’s level of performance on skills is highly variable, and there is always room for more improvement through practice.

Implications for measurement. Skills and competencies require very different measures. Competencies present a relatively easy challenge because they are binary, and researchers can trust self report measures. For example, researchers could simply ask something like “Can you show me how you use your smartphone to send text messages?” They do not need any more detail in the question. The answer to the question becomes obvious through observation.
Skills, in contrast, are much more challenging to measure. The task of assessing skill levels requires researchers to stimulate the performance of the skill so that the level of that performance can be observed in a way that participants can be placed on a continuum according to their levels of performance. It is faulty to assume that participants can rate the level of their own skills because most participants do not have an accurate idea of what skills performance means at levels above their own ability, so they do not have access to an understanding of the full continuum when rating their own skill level.

The challenge of measuring participants’ skill levels lies in developing a template of indicators for each of those levels. Meeting this challenge requires researchers to be clear about what the function of a skill is and how that function can be performed at different levels of ability.

Broad or Specialized

This next skills issue requires us to think about whether the skills mentioned are broad ones or whether they are specific to media literacy. Broad skills are cognitive processes that people use throughout their lives in a wide range of situations. In contrast, there are skills that are only applicable to interacting with the media in literate ways. Examples of this kind of skill are things like writing computer code for a laptop, troubleshooting problems with smartphones, lighting a scene to make a photograph that conveys a particular emotion, etc.

Implications for measurement. If skills are regarded as broad, then it is likely that there is a wide range of ability on each of these skills. Some of this range may be accounted for by age and educational level, but a large part of the variation is more likely traceable to IQ, motivation, need to achieve, and reward history. No single one of these factors can serve as a good predictor of skill level, so none can serve as an adequate surrogate for the skill level. With broad skills, researchers need to design their intervention studies so that they measure the levels of skills before and after the intervention so they can document the degree of change.

The measurement of skills believed to be special to media literacy would seem to be a bit easier challenge, because it is not likely that many people would possess these skills prior to a training-type intervention. Also, researchers are not likely to want to know the level of a participant’s proficiency on these skills, so they can be treated more like competencies in the measurement. For example, we should not expect a high percentage of the population to have message production skills, such as designing a website, running an audio mixing board, writing a computer program for a video game, or editing raw video footage. Of course within the video production industries, making fine distinctions across skill levels is essential for employers and professional organizations, but when conducting media literacy skills assessments on general populations it would be sufficient to distinguish between those with no skill and those with any skill. If skills are regarded as specialized to media literacy, then researchers need to think about what makes them so special to media literacy. They also need to think about whether it is really or skill or a competency.

In summary, scholars who present definitions of media literacy that include a skills component need to think through the three issues presented in this section. They need to provide more detail in the form of specifying domains of skills and be more clear about defining what those skills are. They also need to articulate their vision about whether they are dealing with skills or competencies and if skills, then are those skills broad or specialized to media literacy. Scholars who clearly lay out their positions on these three issues will be providing a great deal more guidance to designers of measures.

Measuring Knowledge.

In this section, we argue that there are three issues that have been largely ignored or under-developed with regard to the knowledge component. These are the issues of specifying domains of knowledge, distinguishing between facts and beliefs, and distinguishing between info-bits and knowledge.

Domains of Knowledge

Almost every conceptualization of media literacy suggests a knowledge component. Like we did with the skills component, we can also analyze the knowledge component in layers of progressive depth. At the most general level, authors make a claim that knowledge is important to media literacy but they do not mention what it is people need to know in order to be media literate. At the first layer displaying definitional detail is the specification of knowledge as a component of media literacy. At the next layer of detail is the specification of domains, such as knowledge about
the media industries and knowledge of media effects. When we look at the suggested knowledge domains in Table 1, we can see that they all appear more as suggestions for what is relevant rather than appearing as an organized set. If we search through these suggestions for organized sets, we can find a few. For example, Silverblatt (1995) suggested that people need knowledge in four areas in order to interpret media messages – process, context, structure, and production values. Potter (2004) argued that media literacy requires well developed knowledge structures in five areas about the media industries, audiences, content, effects, and one’s self. Notice that these areas are very broad.

Like with skills, knowledge seems to present two layers of detail (components and domains), then there is a gap. The current cutting edge with the knowledge component occurs when we move beyond the domains, that is, there are well articulated labels suggesting areas of information that media literate people need but very few detailed treatments of what information is critical to each domain. One example of this is provided by Silverblatt and Eliceiri (1997) in their Dictionary of Media Literacy, however this information is not organized by domain and instead is an alphabetical list of more than 300 entries. An equally detailed list of information but organized by domains is Potter’s eighth edition of Media Literacy (2016), which presents 15 chapters each with its own outline.

Facts vs. Beliefs

There are two types of information that media literacy studies typically measure in the knowledge component, and each of these types has different implications for measurement. One type of information has a factual basis. Factual-type information includes things like (a) FBI statistics say that 12% of all crimes are violent, (b) the National Television Violence Study found that 61% of all shows in American television contained at least one act of violence, and (c) it is illegal for teenagers to purchase and consume alcoholic beverages in the United States. The factual basis gives these statements a truth value, that is, it can be determined whether the claims in the statements are accurate or not.

In contrast, a second type of information arises through inferences derived from observing actions in the world and exists in a person’s mind as beliefs. This belief-type information includes things like the world is a mean and violent place, and the high rate of violence presented in the media is harmful to society. Beliefs are typically based on social information, that is, people observe human behavior, infer patterns, and treat those patterns as indicators social norms.

Implications for measurement. It is important to make a distinction between these two types of information because this distinction has an impact on how the two are measured. Factual information can be measured in a dichotomous manner, because either a person knows a fact or does not. Thus true-false response choices are appropriate. In contrast, beliefs typically vary in intensity as reflected by how important they are to people or the degree to which they believe that something exists. Therefore beliefs can be measured on Likert-type intensity scales.

Information vs. Knowledge

In everyday language we use the terms information and knowledge interchangeably. But in the scholarly realm of media literacy, we need to make a distinction. Information is piecemeal and transitory; while knowledge is structured, organized, and is of more enduring significance. Information resides in the messages, while knowledge resides in a person’s mind.

It is also important to think about whether domains of knowledge are regarded as containers or as labels in a hierarchy. If the domains are containers, then all the information within each container can be regarded as equally important and existing on the same level of generality. Designers of measures for each container need simply to make a list of all relevant items and sample from among them.

If instead, the names of the knowledge domains are used more as labels in a hierarchy, then it is important to think about how the information is organized within those hierarchies. If knowledge domains are regarded as being structured hierarchically, then we have multiple levels of generality to consider. For example, let’s say researchers want to measure participants’ knowledge about the media industries. It is impossible, of course, to write one item that would measure the degree to which participants vary in their knowledge of the media industries, so designers must design multiple items. To illustrate, let’s also say that authors’ conceptual base suggests that there are three key ideas about the media industries as follows: (a) an understanding of the industries’ motivation to maximize profits, (b) an understanding of how the media industries
have developed over time, and (c) an understanding about how the industries attract niche audiences and condition them for repeated exposures. It is possible to write a simple true-false question to measure the first of these sub-domains (i.e., the media industries have a strong motivation to maximize their profits) although such an item could be argued to measure awareness of a motive which is much more superficial than what the sub-domain calls for by way of “understanding” their motivations. But let’s set that issue aside for now. The more serious challenge lies in designing a single item to measure the other two sub-domains. For the second sub-domain it is not possible to design a simple question that can make a meaningful assessment of the level of a participant’s knowledge.

A way to meet this challenge is to think in terms of knowledge hierarchies. These are outlines that display superordinate ideas along with their sub-ordinate components. Sometimes a definition suggests such an outline, such as when Potter (2004) argued that media literacy requires well developed knowledge structures in five areas, and elaborated the key ideas in each with books on media literacy where the information was organized in chapters, each with an outline (see Potter, 2016).

There are advantages and disadvantages of regarding knowledge domains as hierarchies. The major advantages are that hierarchies provide more structured guidance for designing a measurement scheme. Also, cognitive psychology has well documented that humans organize their learning into nested categories, which makes it easier for them to store and retrieve information as well as providing context for meaning (Fiske & Taylor, 1991; Lamberts & Goldstone, 2005). However, the disadvantage is that knowledge hierarchies are more complex and typically require more items to measure well, especially if the domains are not independent (see next section for more on this point).

Implications for measurement. If a study’s conceptual foundation treats the knowledge component as an assortment of information, then the measurement decisions are relatively easy. Designers write items to measure how many bits of information participants have acquired. For example, designers could construct a factual information test of 20 true-false items and regard each of the 20 items as equally important as an indicator of participants’ levels of knowledge. Because the items have a factual basis, researchers can compute a score for each respondent on the information-accuracy scale by summing all the items they answered correctly. Researchers then conclude that respondents with higher scores on the information-accuracy scale demonstrate a higher degree of media literacy compared to other respondents with lower scores. But in order for these scale scores to have meaning, researchers must assume that each item on the scale measures a bit of factual information that is equally important, that is, knowing one bit of information is no more important than knowing any other single bit of information.

In contrast, if researchers rely on a definition of media literacy that emphasizes knowledge rather than information, then measurement decisions are much more challenging because designers need to consider structure. To help them with this structure, researchers need guidance from media literacy theoreticians to provide them with outlines that show what the super-ordinate concepts are and how each super-ordinate concept is composed of particular clusters of sub-ordinate ideas. Without such an outline, researchers face an impossible task of establishing validity. But even with an outline, researchers need to consider the issue of balance. Perhaps concept X can be measured adequately with one item but concept Y might require five items.

Macroe Measurement Issues. Now that we have laid out some issues within two components of media literacy, we shift our attention to a more macro level and consider two issues that need more consideration from media literacy theoreticians. These are the concerns about the use of shortcuts and independence across measures.

Use of Shortcuts

When researchers design measures, they are typically confronted with a trade-off between efficiency and validity. The efficient choice requires less work from designers and less effort from respondents, but these efficient choices often result in measures with lower validity. In such a situation, researchers who select efficiency over validity are relying on shortcuts.

One of the most prevalent shortcuts in the social sciences is the use self report measures. The threats to validity of using self report data have long been recognized by scholars across the social sciences, including sociology (Lauritsen, 1998), anthropology (Bernard, Killworth, Kronenfel, & Sailer, 1984), political science (Sigelman, 1982), criminology (Hindelang, Hirschi, & Weis, 1981),
and behavioral medicine (Stone & Shiffman, 2002) to name a few. For example, in psychology Nisbett and Wilson (1977) showed there was a troubling discrepancy between what people report about themselves and physiological measures. This criticism was ongoing in psychology, and the use of self report measures showed a decrease over the years while in those articles that used self report measures there was an increase in acknowledging their limitations (Haefel & Howard, 2010).

The use of self reports in media literacy is of course warranted when measuring knowledge, attitudes, and beliefs. However, the use of self reports to measure behaviors and skills is typically a shortcut, because it sacrifices validity to achieve efficiency. As for behaviors, media literacy studies are often concerned with measuring mundane occurrences or habits, such as media exposures, use of advertised products, and engaging in mildly risky behaviors. We know from our research literature that these behaviors are guided by automatic routines that run unconsciously and leave no trace of specific details unless those details are highly vivid or out of the ordinary (Kahneman & Tversky, 1984). When we are asked about our mundane behaviors, we have no memory of details so we rely on heuristics to estimate an answer. These answers have little relationship to actual behavior and instead tell us more about the heuristics people use than they tell us about their behaviors. Furthermore, because there is a variety of heuristics, including representativeness, availability, simulation, anchoring, and adjustment (Fiske & Taylor, 1991), the data generated by self reported questions asking about mundane behaviors is likely to be an invalid conglomeration because of different people using different heuristics to make their guesses.

Implications for measurement. We know from the literature that there is a significant problem with self reports, especially those of mundane behaviors. Ignoring this problem with a shortcut serves to introduce a significant source of error variance. When our purpose is to measure actual behavior, we need to avoid self reports of mundane behaviors. Fortunately in the new media environment we can get access to many counts of mundane behaviors, such as cell phone providers’ counts of numbers of texts sent, minutes connected to the internet, number of sites visited, number of movies streamed, etc. But if researchers cannot get access to data bases where a particular mundane behavior has been recorded and if they cannot electronically record the mundane behavior of their own participants, then they need triangulate the self reported data with data from other sources in an attempt to make some sort of a cast for validity of their self reported measures (Slater, 2004).

Independence

Perhaps the most challenging conceptual issue with the measurement of media literacy is independence. This is challenging because it is so complex and because it has been completely ignored in the large literature of media literacy definitions. The issue of independence forces us to think about whether the different elements, especially the components of skills and knowledge, in a conceptualization of media literacy are related to each other or whether each can stand alone. That is, can people really acquire much knowledge relevant to media literacy unless they have a certain level of skill? And can media literacy skills develop without exposure to certain kinds of information?

We also need to consider the issue of independence within each component. Within the skills component, the individual abilities are likely to influence each other so that people cannot be highly developed on skill Y unless they first become highly developed on skill X. For example, Potter (2004) alludes to this when defining his seven skills of media literacy as being partially dependent on one another, that is, combinations of these skills work together at times, while other times they can be used independently. To illustrate, Potter defines the skill of evaluation as the making of a judgment by comparing an element in a media message to a person’s standard. That element may be an obvious manifested one, in which case the skill of evaluation can be used independently. But often a person must analyze a media message to identify an element that is then used in an evaluation; in this case the skill of analysis and evaluation are used together, such that if a person is strong with one of these skills but weak with the other skill, the overall product of using the skills will be weak or faulty.

Within the knowledge component, scholars need to specify whether their domains of knowledge are regarded as being linked together or whether they are independent from one another. For example, let’s say that a conceptualization lays out four domains of knowledge – media industries, content, audiences, and effects. If the four areas of knowledge are regarded as
independent from one another, then limiting measures to one domain is not a problem. Each domain is believed to be composed of a stand-alone set of information that is not influenced by any of the other three, and people can be highly media literate if they have a lot of knowledge in any one area. However, let's say the conceptual foundation used in a study suggests that all four domains of knowledge are linked together into a system of knowledge such that effects cannot be understood without also understanding content patterns, which in turn cannot be understood without understanding industry motives and economics. With this non-independence conceptualization, designers of measures need to include measures across all linked domains of knowledge in order to arrive at a valid assessment of participants' knowledge structures.

Implications for measurement. This issue is largely unaddressed in the literature leading researchers to assume that each component and each domain is independent and can therefore be measured in isolation. If researchers assume that skills can be treated in an independent manner, then the measurement task becomes considerably simpler. Researchers need only to develop a performance task for each skill, then observe how well participants perform on each. Later in the analysis, they can test to see which skills are related. However, such a posteriori tests are focused more on seeing how levels of skills are related, which is not the same as believing a priori that certain skills are antecedents or otherwise intertwined with other skills.

When designers of measures of skills reject the assumption that skills are independent, they create a much more challenging measurement task because they must articulate the pattern of inter-dependency, and this raises a series of questions. Are there threshold levels? That is, until a person reaches a certain level of expertise on a skill, it cannot be observed. Which skills are antecedents for other skills? That is, skill #2 cannot be performed well until a person performs skill #1. Are skills substitutable? That is, in order for people to use skill #3 well, they need to have a high level of either skill #1 or skill #2, but not necessarily both.

5. Conclusion

The analysis of the existing conceptualizations in the media literacy literature reported in this article revealed that there are considerable gaps in the media literacy literature. While there are many definitions of media literacy, the existing definitions typically cluster around highlighting several components, especially skills and knowledge but also behaviors and affects. To a lesser extent there is a clustering around certain domains of skills and particular domains of knowledge. But at this point the conceptualizations stop providing detail, and this inadequate degree of specificity in the explication of media literacy requires researchers to fill in conceptual gaps in order to design their measures. The gaps have resulted in the design of a great many measures of questionable validity, which sets up a vicious cycle. Researchers who want to design a test of media literacy go to the literature for guidance, however that literature shows them an overwhelming choice of definitions with no single definition being regarded as the most useful one. Even more problematic is that none of the many definitions provides enough detail to guide researchers very far through the process of designing measures of media literacy. Until more fully explicated definitions of media literacy are offered to scholars, researchers will be left with little guidance, which will result in the continuation of inadequate conceptual foundations for their empirical studies and therefore a fuzzy and incomplete foundation to use as a standard for judging the validity of their measures.

References


Annexes

Table 1. Definitions for Media Literacy: Components and Domains

<table>
<thead>
<tr>
<th>Skills Focused Components</th>
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<tbody>
<tr>
<td><strong>Generic Skills</strong></td>
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<tr>
<td>Skill building (Alliance for a Media Literate America)</td>
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<tr>
<td>Skills necessary for competent participation in communication across various types of electronic audio and visual media” (Speech Communication Association, 1996, Standard 23)</td>
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<th>Accessing Skills</th>
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<tr>
<td>Ability to access media messages (Moody, 1996)</td>
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<tr>
<td>Ability to access meaning from media messages (Adams &amp; Hamm, 2001; Anderson, 1981; Media Awareness Network; Sholle &amp; Denski, 1995; Silverblatt &amp; Eliceiri, 1997; The National Telemedia Council)</td>
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<td>Ability to recognize the questions posed by language, regardless of the medium that transmits that language (Pattison, 1982)</td>
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<tr>
<th>Interpretation Skills</th>
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<tr>
<td>Ability to make one’s own interpretations from media messages (Anderson, 1981; Adams &amp; Hamm, 2001; Rafferty, 1999; Silverblatt &amp; Eliceiri, 1997; The National Telemedia Council)</td>
</tr>
<tr>
<td>Ability to use aesthetic building blocks to create and shape cognitive and affective mental maps (Zettl, 1998)</td>
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<tr>
<td>Ability to analyze media messages (Anderson, 1981; Adams &amp; Hamm, 2001; Brown, 1998)</td>
</tr>
<tr>
<td>* Particularly ideological analysis, autobiographical analysis, nonverbal communication analysis, mythic analysis, and analysis of production techniques (Silverblatt, Ferry, &amp; Finan, 1999)</td>
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<tr>
<td>* Ability to critically assess media message in order to understand their impact on us, our communities, our society and our planet. It is also a movement to raise awareness of media and their influence. (Northwest Media Literacy Project)</td>
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<tr>
<td>* Critical viewing skills (Children Now)</td>
</tr>
<tr>
<td>* Critical thinking about media messages (Adams &amp; Hamm, 2001; Citizens for Media Literacy; Media Awareness Network; Rafferty, 1999)</td>
</tr>
<tr>
<td>* Critical inquiry (Alliance for a Media Literate America)</td>
</tr>
<tr>
<td>* “a critical-thinking skill that enables audiences to decipher the information that they receive through the channels of mass communications and empowers them to develop independent judgments about media content” (Silverblatt &amp; Eliceiri, 1997: 48).</td>
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<tr>
<th>Message Production Skills</th>
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<tr>
<td>Ability to communicate effectively by writing well (Brown, 1998)</td>
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<tr>
<td>Ability to produce media messages (Adams &amp; Hamm, 2001; Auferheide, 1993; Hobbs, 2001)</td>
</tr>
<tr>
<td>Ability to create counter-representations of media messages (Moody, 1996; Sholle &amp; Denski, 1995; The National Telemedia Council)</td>
</tr>
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</table>
Knowledge Components

Knowledge of Media Industry
"knowledge about how the mass media function in society. . . Ideally, this knowledge should encompass all aspects of the workings of the media: their economic foundations, organizational structures, psychological effects, social consequences, and, above all, their ‘language,’ that is the representational conventions and rhetorical strategies of ads, TV programs, movies, and other forms of mass media content" (p. 70); "an understanding of the representational conventions through which the users of media create and share meanings” especially visual representations. (Messaris, 1998: 70)

Understanding the process, context, structure, and production values of the media (Silverblatt, 1995)

Knowledge of Media Content
Understanding of media content (understanding of the conduits that hold and send messages), of media grammar (understanding of the language or aesthetics of each medium), and of the medium (understanding of the type of setting or environment) (Meyrowitz, 1998)

Knowledge of Media Effects
Understand the effects of the various types of electronic audio and visual media, including television, radio, the telephone, the Internet, computers, electronic conferencing, and film, on media consumers." (Speech Communication Association, 1996, Standard 22)

Understanding of how the media distort aspects of reality as they manufacture their messages and how symbol systems mediate our knowledge of the world (Masterman, 1985)

Learning about "text processing within the broad and complex context of a social, cultural, educational, and commercial textual ecosphere” (Mackey, 2002: 8)

Understanding how media messages shape people's construction of knowledge of the world and the various social, economic, and political position they occupy within it” (Alvermann, Moon, & Hagood, 1999: 1–2)

Knowledge about One's Self
Understanding of one's place in the world (Blanchard & Christ, 1993; McLaren, Hammer, Sholle, & Reilly, 1995; Sholle & Denski, 1994)

Behavioral Components

Generic
"a political, social and cultural practice” (Sholle & Denski, 1995: 17)

Empowerment
Becoming empowered citizens and consumers (Blanchard & Christ, 1993; McLaren, Hammer, Sholle, & Reilly, 1995; Sholle & Denski, 1994)

Moving people from dependency to self-direction by being more reflective (Grow, 1990)

Rather than allow the media to promote unchallenged the quick fix of violent solutions, conflict resolution skills involving patience and negotiation should be taught. (American Psychiatric Association)

Policing one's own viewing behaviour – if not by reducing the amount of television they watch, then at least by watching it in ways which are assumed to minimize its influence” (Buckingham, 1993: 21)

Becoming sophisticated citizens rather than sophisticated consumers (Lewis & Jhally, 1998)

Empowering and liberating people to prepare them for democratic citizenship and political awareness” (Masterman, 2001: 15, writing about the Council of Europe Resolution on Education in Media and New Technologies which was adopted by European Ministers of Education).
**Activism**
Becoming stimulated by social issues that are influenced by the media; these issues are things like violence, materialism, nutrition, body image, distortion in news reporting, and stereotyping by race, class, gender, and sexual orientation (Anderson, 1983)
Becoming "active, free participants in the process rather than static, passive, and subservient to the images and values communicated in a one-way flow from media sources" (Brown, 1998: 47)
Challenging abusive stereotypes and other biased images commonly found in the media (Media Watch)

**Social Networking**
Creating communities of people who interact in complex social and cultural contexts and use this awareness to decide what textual positions to accept (Buckingham, 1998)
“primarily something people do; it is an activity, located in the space between thought and text. Literacy does not just reside in people’s heads as a set of skills to be learned, and it does not just reside on paper, captured as texts to be analysed. Like all human activity, literacy is essentially social, and it is located in the interaction between people” (Barton & Hamilton, 1998: 3; cited in Margaret Mackey, 2002: 5-6)
Developing a "critical spirit" while encouraging “collaboration with professional people and agencies in both fields” (Commission 1, 1992: 222-223)

**Affective Components**
Pay more attention to one’s own affective investment as one consumes the media (Sholle & Denski, 1995)
Ability to appreciate media messages (Adams & Hamm, 2001) especially respected works of literature (Brown, 1998)

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**Table 2. The Seven Skills of Media Literacy**

1. Analysis - breaking down a message into meaningful elements
2. Evaluation - judging the value of an element; the judgment is made by comparing a message element to some standard
3. Grouping - determining which elements are alike in some way; determining how a group of elements are different from other groups of elements
4. Induction - inferring a pattern across a small set of elements, then generalizing the pattern to all elements in the set
5. Deduction - using general principles to explain particulars
6. Synthesis - assembling elements into a new structure
7. Abstracting - creating a brief, clear, and accurate description capturing the essence of a message in a smaller number of words than the message itself
Figure 1

Pyramid Structure

General Definition

Component  Component  Component
Domain      Domain      Domain      Domain      Domain

GAP

Measure  Measure  Measure  Measure  Measure  Measure  Measure  Measure  Measure
The Impact of Media Literacy Curriculum on the Literate Behavior of At-risk Adolescents

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Abstract

This paper offers an inquiry that involves media education, literacy, media production, and analysis as modes of teaching and inquiry related to students labeled "at-risk." Included are traditional, methodological, interpretive, social, and media issues that are inherent in literacy practices in classroom settings. At the same time, it outlines, practical, and tried non-traditional approaches that consider literary practices with an expanded notion of literacy, both a conceptual and practical bearing on areas such as English Language Arts Methods and Media Education curriculum, multi-media, video production, media text analysis and collaborative learning. Finally this paper argues that the struggle for literacy is one that can often be resolved in unexpected ways.

Some of the key questions of this paper are:

1. To what extent are the observations I made about the responses of the ACE students to my Media Education Curriculum idiosyncratic?
2. To what extent are the ACE students' abilities in dealing with traditional forms of texts affected by their experiences with Media Education Curriculum?
3. Perhaps most important, are the curricular and pedagogical questions which arise from my inquiry. One question is, "Are we willing to rethink who, how, and what we are teaching in order to develop approaches and methodologies that motivate and encourage, not only students who are struggling with traditional schooling practices, but also all students?"

Keywords: English language, arts methods, media literacy, media text analysis, literacy.

1. Introduction

This paper offers an inquiry that involves media education, literacy, media production, and analysis as modes of teaching and inquiry related to students labeled "at-risk." Included are traditional, methodological, interpretive, social, and media issues that are inherent in literacy practices in classroom settings. At the same time, it outlines, practical, and tried non-traditional approaches that consider literary practices with an expanded notion of literacy, both a conceptual and practical bearing on areas such as English Language Arts Methods and Media Education curriculum, multi-media, video production, media text analysis and collaborative learning. Finally this paper argues that the struggle for literacy is one that can often be resolved in unexpected ways.

Introducing the Alternative Career Education (ACE) Program and Students

It is important at the outset to provide a brief background for the context in which the inquiry took place and the students involved.

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The global aim of the Alternative Career Education (ACE) Program is to assist at-risk students in acquiring personal and employability skills necessary to participate in the information workplace and society by providing a learning environment that links learning in school with learning in the workplace. The ACE Program promotes the notion that learning is ongoing and occurs both within formal schooling as well as in the broader social communities, of which the workplace is a vital element.

The Alternative Career Education students vary in age from sixteen to nineteen years. Most are English speaking mother tongue, many are French, bilingual. They are physically and socially indistinguishable from typical high school students. The ACE Students aspire to be successful academically and vocationally, and contrary to the stereotypical image of at-risk students, most are actually quite capable learners. Indeed, many ACE Students want to succeed and learn, do not want to drop out of school, are naturally curious, adaptable to new situations and capable of higher-level thinking.

As part of their studies in the ACE Program, the ACE students participate in On-the-Job Training, i.e. work placements outside of the school environment, twice a year for approximately six weeks at a time and as such they are in many ways modern day apprentices.

So what identifies the ACE Students as at-risk?

- While their average age is sixteen, their typical reading levels, as determined by a standardized reading test is between grades five and seven, placing them well below grade nine, the norm for students of their age.
- At the extreme, there are ACE students who are reading and writing at the pre-high school level.
- They have been denied access to a high school diploma within the structures, as they now exist in Quebec high schools.
- Most have very few high school credits, some have none.
- They cannot complete the required courses in the allotted amount of time, using approaches and methods of evaluation. Indeed, some never will.
- The results of their negative experiences in school, and at home, have left many students “turned off” to schooling.

The Curriculum: An Integrated English Language Arts/Media Education Program

Using a re-conceptualization of literacy I devised a Media Education curriculum in which the ACE Students analyzed/read and wrote/produced popular media texts. Through this investigation insights were gained into the ‘literate abilities and behaviors’ that at-risk students possess and can demonstrate, which traditional measures of literacy were unable to uncover. This included learning about the mass media and the technologies associated with it, using and studying popular culture texts in the classroom and producing their own media texts. It should be noted that the term text in this paper refers to both print and non-print media.

2. Materials and methods

Using a single case classroom based action research design, the primary research question for this study is: what kinds of ‘literate behaviors’ do at-risk students demonstrate following the implementation of a Media Education Curriculum? I use the term behavior in this paper as “a conscious use of new or expanding repertoires as readers and writers” [Emery, Anderson, Rother, Tiseo, Mitchell, & Brandeis, 1995].

Associated with this question are the following considerations:

- What kinds of knowledge do at-risk students bring to bear as producers and consumers of media, following participation in a Media Education Curriculum?
- Does Media Education Curriculum assist at-risk students’ understanding of traditional print texts?
- What kinds of Media Education approaches and methodologies are appropriate?
3. Discussion
The Literate Behavior of Analyzing/Reading: A Dialogic Approach to Analyzing Texts

In the process of analyzing media texts with students, I adopted visual as well as film literacy. According to P. Yenawine (1997) visual literacy is the ability to find meaning in imagery, involving a set of skills ranging from simple identification to complex interpretation of contextual, metaphoric and philosophical levels. In the process various cognitive characteristics, such as personal association, questioning, speculating, analyzing, fact-finding, and categorizing are engaged. At the same time Frank Baker (email 2011) describes film literacy as active viewing: being aware of all of the elements that go into production.

In terms of critical pedagogy the methodology employed in analyzing media texts with the ACE Students is best characterized by Freire (1973) as a dialogue that involves an “I-Thou relationship between two subjects” (p. 52) in which the students and I engaged in a two-way communication. Masterman (1985) characterizes dialogue as a “genuine sharing of power” (p. 33) in which each participant listens carefully and responds to what has been said. The intent is to come to a better understanding of the issue or topic at hand.

The Text: The Apprentice

The Apprentice is a video of an animated film produced by the National Film Board of Canada. It tells the story of a teacher and his apprentice as they travel across the countryside. The bizarre nature of The Apprentice, and the fact that it seemed to be aimed at a young audience, made me apprehensive about using it with the ACE students. Still, since there was no dialogue, it presented a good opportunity for my students to demonstrate what they had learned about “reading” visual texts earlier in the school year. I told the ACE Students that we would read/view the video without stopping and without interruptions. Following this, we would discuss the beginning, middle and end, plot and characters. I invited them to take notes but as is often the case with students who have writing difficulties, few did. Without any further introduction, the video was presented in its entirety.

As I had expected, many thought that the video had no point at all. Surprisingly, this actually added to their interest and curiosity. The classroom echoed to a chorus of, “Let’s see it again.” Surprised by their response, we viewed it again. With each reading and rereading of the Apprentice, the students analyzed and reconsidered their earlier readings. They developed associations and connections that provided them with insights to their initial understandings, predictions and inferences.

I quickly began to realize that the students were moving beyond a simple retelling of the narrative; that is the beginning, middle and end of the story. Subsequently, I shifted the activity toward interpretation, getting the students to share what they felt the author of the video intended and what meaning they found in the text.

Since I wanted to see what elements helped them read the video, I asked them to tell me what visual cues assisted them. Some of the symbols, which the students considered significant, and the meanings they associated with them, are listed below:

- Apprentice - a beginner; self
- Teacher - wisdom, experience
- Laughing flowers - pressure; society laughing at our mistakes distraction; frustration
- Cliff - obstacles; people who fell off and didn’t get back up to try again
- Hourglass - time is running out
- Two roads - fate; temptation
- Cliff/fall - stupidity; mistakes
- Tree - realization; obstacle
- Sword – strength
- Nose - discouraging; truth; lesson; challenge
By referring to the list of symbols they developed the following themes:

- Making mistakes
- Learn by your mistakes
- Don’t think you know it all
- Let someone guide you, listen and understand
- Let experience guide you.
- Learning the hard way
- Avoiding obstacles
- Learn first; don’t rush

Our discussion of The Apprentice was in essence dialogues, between the students and me, about what it means to read stories, as symbols through which we could better understand ourselves. The symbols provided ways for the students to incorporate into their readings of the text, their own experiences as ACE students – apprentices and as part–time workers – as well as their experiences with other mass media texts about the world of work and the family.

The students positioned themselves within the fictional world of the characters in the video. Their reading was more than a shallow retelling of the narrative such as its plot, themes, script, conflict/resolution, and symbolism. They responded to the narrative’s structure in very specific and personal ways (Masterman, 1985). At the same time they viewed and identified with the characters on the television monitor, reorganizing them in relation to their own experiences and as participants in the viewing process. In Britton’s (1975) terms the ACE students acted in the role of spectator. I argue that acting in the role of spectator is a highly literate behavior indeed.

By appropriating the author’s intended message(s) (Willinsky, 1991), and relating it to their own situation, that is to their on-the-job training sessions, the students reworked the narrative, constructing it as their own personal narratives. In doing so, the students themselves became storytellers. The students unraveled each thread of the story’s rhetoric and spun it into their own autobiographies. By assigning themselves as the main character (student/apprentices in the ACE Program), they retold the story from their particular perspectives and points of view – in the process discovering more about themselves. In Moffett’s (1968) words, The Apprentice was for the students, about growth and self–knowledge.

The ACE students’ reading of The Apprentice was not an isolated experience. Each student made meaning of the text; sharing their interpretations and representations constituted a collaborative experience. Willinsky (1992) writes that texts serve as foundations for telling and retelling stories, built upon social and cultural experiences. English Language Arts theorists/educators such as Medway (1980) speak of coming to terms with our inner self through talking, reading and writing. The ACE students’ interpretations and hypotheses about how they see themselves and how others see them, developed through social interaction, primarily through sharing their ideas with other students in the class. Britton (1970) called this expressive language, and (Barnes, 1992), referred to this as exploratory talk.

The ACE students read – they understood and responded to, written and visual languages. They wrote – they used print, oral/aural, and visual forms of language, within a social context, for specific and relevant purposes and for different audiences. Britton (1975) calls these activities of reading and writing means of coming to terms with ideas and experiences and of communicating with others. These are the expressive, transactional and poetic functions of language.

As well, the ACE Students’ reading of The Apprentice brings to mind the notion of semiotics as sign–systems, which underlie the fundamental principle of Media Education. The principle of non–transparency asserts that, “media are symbolic (or sign) systems which need to be actively read, and not unproblematic self–explanatory reflections of external reality” (Masterman, 1985: 20). In order to be media literate a student must be able to understand the sign and symbol system of media (Silverblatt, 1995), something of which the ACE Students were quite adept.

The viewing of The Apprentice provided a forum for the students to talk openly and purposefully about their lives, goals and experiences as apprentices in an open atmosphere, which to the students, was personally purposeful. The students’ ideas came from their own stories, real
and imagined, and which enabled them to construct an idea of a common culture, making sense of their social world. Shirley Brice Heath (1983) remarks that finding meaning in a text is a social as well as a literary understanding. The interaction among the ACE students and the text demonstrated to me that their reading/viewing was more complex than I had previously thought. It also reinforced for me that the language involved in such social discourse should be included in English Language Arts classrooms, in the same way as are other social discourses.

The ACE students are often referred to as “reluctant readers”. I would argue that this is a stereotyped label. While they may be reluctant to read the specific texts demanded of them in schooling, my experience, as I have illustrated here, has been that they are indeed eager readers. In the process of reading and dialoguing about The Apprentice the students were able to make personal meaning from the text. They were then able to articulate that meaning to the rest of the class. This is what Moffet and Wagner (1976) said about reading and writing involving the ability to move from interior dialogue based on personal values and experiences to social speech. Rosenblatt’s (1978) notion of reading as a transactional process in which readers act upon texts by reconstructing them, explains the ACE students’ ability to make connections among their life experiences, with various ideas and experiences represented in The Apprentice. The Students’ retelling of the text, based on their own life experiences is evidence of the notion that texts are not fixed creations but develop through collaboration and appropriation of texts (Willinsky, 1991).

There are several things I want to say about the reading experiences, which I think contributed to generating evidence of the ACE students’ literate behavior. One concerns twin notions of interdependency and independence, the other issue is inclusiveness.

In the ACE Program, the students and I nurtured each other’s ideas, constructing our own interpretations of the texts. As we talked about the videos, I acted as secretary, writing the students’ ideas on the blackboard so that we could all see each other’s contribution to the discussion and the results of our individual and collective thinking. This approach enabled the students to understand that:

1. Not everyone reads stories the same way.
2. We can read the same text differently.
3. Individuals have the ability to add to the shared meaning.

By using the responses of their fellow classmates’ writing on the board, the students were able to tease out ideas, gradually progressing to more sophisticated understandings of the texts. I am reminded here of what Dewey (1934) wrote that education comes about through the inspiration a student gets from those with whom he interacts, including his/her classmates and his/her teacher. The technique of open dialogue of student responses and writing them on the board also gave the students opportunities to voice uncertainties about ideas. They realized that not knowing and/or questioning their own ideas was acceptable and did not mean that they were “stupid”.

Often the feedback given to students helped them clarify their ideas. Freire (1970) wrote: “education is a live and creative dialogue in which everyone knows something and does not know others, in which we all seek together to know more” (Freire, 1970: 113).

A second, and what I consider an extremely important aspect of the socialization experiences described above, is the issue of inclusiveness. Approaching the reading experiences through dialogue and discussion created an inclusive reading environment. Grade and/or credit levels, and social status in the class, were inconsequential. The reading experiences let each student see that his/her idea had value and contributed to our collective understanding, something that was especially important for the traditionally weaker students. Frequently, we discourage weaker students from participating by trying to draw out more than what they are able to offer “on the spot”. By prodding too much, many of these students are reluctant to take risks and tend to draw away from these situations. In creating an inclusive atmosphere, all of the students were encouraged to continue reading and to actively participate.

The students were actively involved in analyzing, reading, talking, writing. The classroom atmosphere was alive. In most instances the students were stimulated. I trusted the students to learn and they trusted me to get out of their way and let them learn. I encouraged the students to develop their own patterns of addressing the problems they were pursuing. I let them organize their learning strategies, and they let me in on their learning, as a mentor and coach. There was no set routine to the learning. While I had an idea of the direction I wanted the class to go in the initial
reading/viewing activities, the students shaped and implemented the days that followed. Some days they worked in class, on others, with the required preparations, their investigations took them outside of the class into the larger community. Some days they worked in the classroom at their desks, on others they were scattered about on computers, video editing or hidden in a closet producing a radio show. Vygotsky (1978) referred to this approach as ‘taking advantage of the zone of proximal development’ in which a student is guided to solve problems on his own, using all of his/her prior understanding (scientific conceptual knowledge). It was messy learning, but it was real learning. It was the kind of learning which created a sense of community.

Further, the ACE Students’ analysis/reading of The Apprentice reinforced my view regarding the importance of a student’s repertoires (McCormick, Waller and Flower, 1992) in the reading, and writing process. The students’ reading of The Apprentice drew from their own experiences, memories (Britton, 1970).

Literate Behavior of Reading/Analysis

The preceding confirmed that the ACE students possess the following literate behaviors of reading/analysis:

- A sophisticated understanding of and critical stance toward the dominant means of communication in their lives - the mass media.
- Ability to conceptualize ideas for themselves and others.
- Express those ideas in words, images and sounds.
- Encode those ideas in organized, sequential, and clear presentations, which includes an articulation of their personal sensibilities.
- Participate openly in an exchange of ideas and opinions as scholars/producers of media texts.
- Use inquiry and critical thinking skills to develop their interests.
- Develop self-expression and feeling of self-worth.
- Evidence that meaning in texts is determined not by what individual words express, but rather by what words convey through their relationship to each other.

I am not totally surprised by these findings. The ACE students like most other students, bring experiences of thousands of hours of viewing, listening and interacting with media to school. In other words, students, such as those in the ACE Program, come to school with an already developed repertoire of media consumption that needs to be fully acknowledged, organized and exploited within the context of schooling.

The Literate Behavior of Writing/Producing: Marketing A Popular Culture Product

Marketing A Popular Culture Product: A Simulation in Entrepreneurship was a multi-media, cross discipline project. In this section I will describe the ACE students’ knowledge of specific aspects of media industries, including advertising, audience research, economics, and the processes by which media and popular culture products are produced and distributed. As well, I will provide examples of their awareness of the form and conventions associated with media texts produced by media industries.

In groups of three or four, ACE students were required to develop a popular culture product, adapted from something in existence or something new, aimed at a specific audience. Group members assumed one of the following roles: media producers, researchers, text editors, video editors, artists and talent. The students were provided with a “fictional” amount of money, as a working budget from which to finance the development of a prototype, packaging and a multi-media advertising campaign, such as television, radio and print, for their product.

In the process of working on the Marketing Project, many of the ACE students described the links between the production and ownership of popular culture texts. For example, each group gave itself a company name and an associated trademark and slogan. I recall one student forcefully
stating that “his company” needed to place a copyright symbol on their package so that other
groups of students would not be able to steal their ideas. This led to each group doing the same.

Cowles and Dick (1984) suggested that Media Education should begin in a classroom with
exploring the commercial aspects of media. As cultural artifacts, media representations are
produced, owned and controlled by individuals and organizations.

The process of constructing media texts is influenced by the powers and motives of
ownership; that is, media texts have embedded in them the dominant ideology of capitalism and
private property. Furthermore, media producers are also subject to constraints: technological,
legal, economic, codes and practices that may mitigate the messages of the texts themselves.
The objective of exploring production is to help students understand the relationship among these
dimensions of media production, including an understanding of the infrastructures of media
monopolies, their creation, ownership, control and relationship to other independent media, how
media ownership influences content, and how the media industry is regulated (Masterman, 1985,
1994; Silverblatt, 1995).

The Marketing Project required the students to produce multi-media advertising campaign
including a print advertisement such as a newspaper or magazine ad, a 30 second television and
radio commercial. I started the advertising section of the project by reviewing the communication
model as a sender, a receiver, and a message, bound by a purpose; all communication should
involve feedback, where the receiver of the message becomes the sender of information to indicate
whether or not the message has been received and understood (p. 3). Having presented the model,
the students participated in several activities focusing on how advertisements are developed for
specific audiences. The students demonstrated their knowledge of the communication model, as a
set of relations among sender, receiver and message (Moffett and Wagner, 1976), as well as a
“sense of audience”. This is illustrated in the student exchange:

S.H: Communication is about getting a message across.
Me: Right, communication is also about sharing ideas.
J.N: Ya, passing on information, but you’ve got to be able to understand the information.
M.D: Ya, what’s the use of receiving information if you don’t understand it?
You have to be able to take some kind of action.

The advertising activities provided the students with an awareness of how advertisers reach
an audience. Students were able to display the literate behavior of constructing subjective
meanings based on their prior knowledge. For example, they linked their previous social and
cultural knowledge of stereotypical images of the ideal man and woman, with an awareness of how
advertisements use words and images to play into the desire to live up to these images. In other
words, the students made connections between their previous social and cultural knowledge with
that of specific texts, conventions and genre. They also demonstrated that particular products are
developed with very specific demographic information in mind.

Also, the students were aware of the notion of agency in advertising – the idea that there are
individuals behind the advertisements whose motivation is to manipulate a viewer.

While activities previously described provided the students with an awareness of how
advertisers reach an audience, it was in the process of producing their own commercials they began
to understand the importance of making a message clear to the audience. Further, actual hands–on
experiences using various media technology demystified for them how media can be used to attract
an audience to a product. One aspect of the students’ work, which may not be apparent here, is that
they produced many drafts of their work, according to my and their discussions – revising, editing
and revising again. Perhaps most significant was that they rarely complained about having to revise
their work. In fact, many of them took pride in the number of drafts they produced. Indeed, I think
that they felt a sense of accomplishment. This in itself is significant when we consider that writing
was something that most at-risk students greatly dislike, and in some cases fear.

When discussing the idea of product placement, that is, “an advertising technique used by
companies to subtly promote their products through a non-traditional advertising technique,
usually through appearances in film, television, or other media” (businessdictionary.com), one
student stated:
“I am constantly counting covert commercials. I can’t watch anything without noticing a covert commercial. It gets on my parents are surprised that I know what a covert commercial is, so they can’t say I don’t listen and learn in class”.

Outcomes of the ACE students’ learning, resulting from the media projects, were not always immediate. It is only through classroom discussions that the learning becomes apparent, as is evident in the following Student comment:

“I see things much differently since I’ve worked with the media, and I’ve only learned a little. I seem to have learned very much. With books and magazines I get to read articles, and now I pick up more than I would normally have. In TV and movies some parts in the shots they take, and I critic them and think of what kind of shot I would have taken.”

Further, in the process of participating in Marketing a Popular Culture Product, the ability to form bridges among one’s prior knowledge into new areas of understanding in the process of reading and/or writing a media text. In the comment below, the student made reference to her awareness that she had heard certain words in what she was viewing on television, and as a result of the media projects, had come to realize their meaning and how they relate to his understanding of gender issues.

“It all changed when we started all the projects. I started to hear more words on T.V. that we used in class and I would of never known these words or understood the meaning of the topic. I noticed more and more as I went along every project that I learned more and more”.

Being aware of and being able to use specific visual conventions, such as camera shots, angles, and movement to convey meaning is an important aspect of the Literate Behavior of Writing. Many ACE Students were pleased with their newly acquired knowledge of media production as evident in the comment below:

“Before I started media production I just questioned some of it like why they did it or why they did it this way. And now after taking the media course I can understand. Like in movies, it can be an action or romance, whatever. Like how different shots can change the mood of things. Like a close-up or long shot make it seem like different feelings. I practiced angle, shots, you get to understand how it works and how they do that. Ya, like I know how to do that or I’d like to know how to do that”.

Media production work seemed to interact with many of the ACE Students’ more traditional literacy skills, strengthening each other reflexively. For some students this meant increasing their efforts to advance their writing skills. Many began to be more conscious of different writing techniques. Working with the video cameras gave students different points of view, not only about the media and/or social issues, but also about ways of learning. Some saw that improved writing skills were necessary to produce better videos. Creating storyboards helped these students conceptualize their ideas, so that their writing was better organized and clearer. Knowing that there was an audience, besides a teacher, made writing a more purposeful activity. On many occasions, students sought my, and/or their classmates, advice on how best to word a sentence so that it was clearer, or how to be more economical with their words. Many ACE students realized that media technology and media production provided an avenue for print and visual expression of ideas.

The Literate Behavior of Writing

In the process of working on Marketing Project, there were several instances when ACE students exhibited their understanding of the conventions used in various media texts, and the links among language form and content. Examples of these understandings include their discussions about advertisements genres, audiences, purposes and contexts could be identified by: the specific spoken language - vocabulary, dialect; sound effects and music; and/or the specific production techniques - camera shots, angles, movement, pacing. Their media projects displayed their understanding of how language forms and media languages could be manipulated for specific audiences, purposes and contexts.
Writing and/or producing a print and a media text invoke similar processes: rehearsing/planning, drafting/organizing, revising, editing and publishing/presenting. Both writing and media productions begin with imagining in the mind’s eye the message that is to be conveyed to an audience and the words/images that will create the intended message. All kinds of texts involve the printed word at some stage of their development.

So for instance, before embarking on their media productions, the ACE students first met in groups and rehearsed what message they wanted to create in their productions and planned how they were going to go about creating the message. The students then, drafted a production proposal and organized themselves according to the people, places and things, which they needed to complete their productions. Part of the organization also included revising, drafting and editing the production.

Results

The ACE Students’ Struggle for Literacy

I have come to the conclusion that the ACE Students are literate and that traditional practices of literacy education prevented us from acknowledging their literacy. Schooling’s notion of literacy which used de-contextualized print texts as the only data source to determine the ACE students’ literacy reflects almost exactly Street’s (1984) characterization of a model of literacy that is outdated and inadequate. The principal assumption of the “autonomous model” is that literacy is largely determined by performance on “essay texts”, and from performance accessors generalize broadly from what is, in fact, a narrow culture-specific practice. Other features of the model include the following assumptions:

- There is a single direction in which literacy development can be traced, and are all the direct result of that development – ‘progress’, ‘civilization’, individual liberty and social mobility.
- That literacy is distinguishable from schooling.
- That literacy can be isolated as an independent variable and the consequent claim that we can study its consequences.
- That the consequences are represented in terms of cognitive skills and/or economic ‘take off’.

Schooling’s adherence to what I consider an outdated view of literacy has had disastrous consequences for the kinds of students who are “at-risk”. In spite of the fact that I have discovered how literate my ACE students are in reading and writing their texts, I continue to be frustrated by the refusal of my school system, and, I believe most of the outside world, to relinquish its hold on this “autonomous model” and the concomitant consequences that result. For the ACE students their “illiteracy” will continue to result in a: ... struggle for development, justice, greater equality, respect of cultures and recognition of human dignity of all and the claims of each to an economic, social and political stake in society and the fruits which derive there from (UNESCO, 1989: 4).

Over the last thirty years, many educators have tried to boost the self-esteem of at–risk students through various “feel good” approaches and activities, but these educators have not fundamentally changed their conceptualizations of literacy or pedagogy. Ironically for the ACE students, the results have been the opposite of these educators’ intentions.

Traditional methods and approaches have inadvertently contributed to poor feelings of self worth and a lack of interest in school. The Media Education Curriculum I developed for this inquiry challenged, involved and encouraged the ACE students to develop their overall literacy. Several ACE Students said that it was one of the principal reasons for their staying in school.

J.A. was one of my students who, on her own, decided that the “regular program” was not meeting her needs and conversely she was not able to meet its demands, and decided that the ACE Program might help. In her journal, she wrote:

I was one of those students who felt I was at a dead end. I thought there was no help for me and everyone, including myself, thought I was a lost cause. I started to have very low self–esteem.

After a couple of weeks in the ACE Program, my self–esteem soared. I started feeling good about myself. I finally felt I had a place in school. I started getting active and happy in doing my assigned tasks. I went to school everyday with a smile rather than a frown. It felt good waking up in the morning.
On the basis of my experience with the ACE students, I wish to argue that education needs to rethink how it approaches literacy so that it recognizes:

1. Reading and writing as socio-cultural practices that are context bound.
2. Texts students are asked to read and write include both print and audio-visual forms.
3. That texts students are asked to read have relevancy to them (i.e., that they take cognizance of the students’ own socio-cultural contexts) and that students’ response to these texts form the basis of their literacy education. One of the ways that would ensure the authenticity and relevancy of responses is to have students choose texts.
4. That the data sources used to assess students’ literacy take cognizance of and reflect the context-bound nature of literacy practices of these young people.

I have attempted in this inquiry to situate literacy within a broader set of individual and social competencies. I have chosen in this inquiry to focus on ways in which the ACE students exhibited their own form of literate behaviors in the process of reading and writing media texts. I believe that the Media Education Curriculum I developed enabled me to identify some of the parameters of the ACE students' literacy and to confirm the effectiveness of the Media Education Curriculum and the pedagogy I used in developing the literate abilities of the ACE students.

**Conclusion**

The results of the inquiry suggest that the consideration of Media Education within a conceptual framework of literacy holds considerable promise for research, curriculum development and pedagogy for not only at-risk students but also all students.

In many ways, this inquiry has left me with as many questions as answers. Some of the questions which have arisen from this inquiry and which are points for future qualitative explorations are:

1. To what extent are the observations I made about the responses of the ACE students to my Media Education Curriculum idiosyncratic? I believe that the results of this inquiry do have potential benefits for similar alternatives programs. However, more studies of Media Education Curriculum and Pedagogy with at-risk students should be undertaken.

2. To what extent are the ACE students’ abilities in dealing with traditional forms of texts affected by their experiences with Media Education Curriculum? I presented indications that the ACE students were able to translate their literate interpretations and constructions of media texts to more traditional forms, but much more investigative work needs to be done on this, both with at-risk and mainstream students.

3. Perhaps most important, are the curricular and pedagogical questions which arise from my inquiry. One question is, "Are we willing to rethink who, how, and what we are teaching in order to develop approaches and methodologies that motivate and encourage, not only students who are struggling with traditional schooling practices, but also all students?" A broader question is implicated, "What types of investigations must educators perform regarding factors which lead schooling to resist the kinds of literacy I, and what changes in education must occur if such a model is to work?"

**References**


Reflections on Information Literacy

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Abstract

Information Literacy is an emerging discipline that operates according to a set of principles and strategies that enable individuals to make sense of the information we are exposed to on an ongoing basis. This discipline, which is defined as the ability to access and assess information, provides a framework that facilitates the discussion of Information with others—including children, peers, and the people responsible for the presentation of information. The paper identifies points of convergence with Media Literacy but makes the point that they remain distinct areas of study. The paper also identifies a series Lines of Inquiry that distinguishes this important discipline.

Principle #1: The Body of Information (BOI) to which a person is exposed represents a version of reality. Instituting a BOI is a selective process; much depends upon which pieces of information have been assembled into a coherent narrative.

Principle #2: The choice of audience affects the strategy and content of the information. Consequently, assessing the BOI—the composite of Information that has been collected by (or for) an individual—can provide insight into the intended audience.

Principle #3: Data is, in itself, neutral. What determines whether it is instructive or deceptive depends largely on who is selecting and assembling the information, why it is being presented, and who is the intended audience.

Keywords: information literacy, media literacy, research, ability, access, audience, content, analysis.

1. Introduction

Over the last two hundred years, we have moved from an Agrarian Society, through the Industrial Age, into a Service Economy, and finally to an Information Culture. To be sure, we continue to grow food and manufacture products. But in contemporary society, information has emerged as our principal resource. As reporter Natasha Singer observes, “Data is the new oil.” (Singer, 2013).

This cultural transformation has been accompanied by the emergence of a new discipline: Information Literacy. Information Literacy can be defined as the ability to access and assess information. Information literacy operates according to a set of principles and strategies that enable individuals to make sense of the information we are exposed to on an ongoing basis. These strategies also provide a framework that facilitates the discussion of Information with others—including children, peers, and the people responsible for the presentation of information.

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2. Materials and methods

- **Principle #1** The Body of Information (BOI) to which a person is exposed represents a *version* of reality. Instituting a BOI is a selective process; much depends upon which pieces of information have been assembled into a coherent narrative.

- **Principle #2** The choice of audience affects the *strategy* and *content* of the information. Consequently, assessing the BOI—the composite of Information that has been collected by (or for) an individual—can provide insight into the intended audience.

- **Principle #3** Data is, in itself, neutral. What determines whether it is instructive or deceptive depends largely on *who* is selecting and assembling the information, *why* it is being presented, and *why* is the intended *audience*. Alex Pentland, Toshiba Professor at MIT’s Media Lab, regards Big Data as “a classic example of ‘Promethean fire: It can be used for good or ill.’

UNESCO, the education wing of the United Nations, has advocated combining Information Literacy with another discipline: Media Literacy. The most obvious point of convergence between these two disciplines is the application of *critical thinking skills* to their particular areas of focus. But although these disciplines are clearly related and, in some instances, overlap, they remain distinct areas of study:

- Information Literacy applies critical thinking skills to the assessment of Information.
- Media Literacy is a critical thinking skill that is applied to the *source* of most of our information—the channels of mass communication.

3. Discussion and Results

Information Literacy—again, the ability to *access* and *assess* information—focuses on the following Lines of Inquiry:

1. **Identifying patterns of data in ways that previously have been impossible to detect.**

The discipline of Information Literacy is rooted in *Epistemology*—the branch of philosophy that focuses on the nature and origin of Knowledge. The primary unit of Information Society is *data*—that is, factual information that is expressed through quantifiable measurements. When linked together, data forms complex units of information. The formation of these “links” is the dynamic behind the conversion of data into *Knowledge*. Knowledge requires a familiarity with factual information, an understanding of derivations, contexts, and processes. Moreover, knowledge is cumulative, building on existing information to extend an idea or create a new concept.

The final Epistemological stage is the conversion of Knowledge into *Wisdom*—a personal process, in which an individual considers the context, implications, nuances, connections, and consequences of the human experience.

However, the avalanche of information available in the digital media age represents the first major obstacle to the analysis of information:

- Between the birth of the world and 2003, five exabytes of content were created. In 2013, 5 exabytes of content were created *each day* (Gunelius, 2014).
- An individual’s daily consumption of information through the channels of mass media now exceeds 6.9 zillion (i.e. million million) gigabytes of information per day (Zverina, 2015).
- Fortune 500-size companies have accumulated over an exabyte (a billion gigabytes) of data scattered across thousands of servers and hundreds of thousands of software applications (White, 2014).

This influx of information raises serious concerns about our ability to circumnavigate through this vast ocean of material. In his short story, “Reification”, R. Joseph Heagany alludes to this conundrum:

Even now, dear reader, you underestimate the impact of what you know. Why? Because the amount of knowledge now in your world exceeds your ability to understand it, let alone even observe it. Hence, you are compelled to underestimate its impact in proportion to your inability to understand it. Still, we do increase in understanding, albeit at a pace far behind that of unfolding knowledge. It is this permanent laggard position between our brains and ‘what is’ that is distressful to me, and why, perhaps, I reply to the universal question of ‘What if?’ with a yawning, ‘Whatever.’ (Heagany, Unpublished).
As Heagany suggests, we don’t need to be able to discover more data so much as we need to figure out ways to make sense of the information that we do possess. It is within this context that Information Literacy has emerged as an essential area of study, providing us with the tools to make sense of the information that we receive on an ongoing basis.

One of the foremost characteristics of digital technology is its ability to extend human beings’ gestalt: that is, our innate predisposition to order. Unlike other members of the animal kingdom, human beings can detect patterns within larger, complex bodies of information. For instance, a photograph of a sailboat that appears in the newspaper is actually a composite of dots, in different shades and/or colors. However, because human beings are gifted with the ability to detect patterns, they can identify the sailboat within this amalgam of dots.

But now, due to the overwhelming amount of information in the virtual universe, it has become nearly impossible to detect patterns within accumulated information. Moreover, a number of the factors further complicate this process:

- The analysis of data often works within a strict time imperative, pressuring individuals to make immediate sense of reams of data.
- Knowledge is often sequential in nature, building on existing information. As a result, assimilating a body of information may require prerequisite understandings within this mass of information before moving to the next level of knowledge.
- The acquisition of information may have complex implications, which can be easily overlooked and undetected.

Initially, computers were developed for the instantaneous gathering of data but did not have the capacity to discover patterns within the mass of information. Some scholars’ predictions about the computer’s ability to recognize patterns was predicated on head-to-head competition with human beings in the ancient game of Go, which requires the instantaneous recognition of complex patterns in a mass of information. Computer scholar George Johnson explains,

> Capturing in a computer something closer to human intuition — the ability to seek and respond to meaningful patterns — seemed crucial and very far away. Back in 1997, I wrote, ‘To play a decent game of Go, a computer must be endowed with the ability to recognize subtle, complex patterns and to draw on the kind of intuitive knowledge that is the hallmark of human intelligence.’ Defeating a human Go champion… will be a sign that artificial intelligence is truly beginning to become as good as the real thing.” (Johnson, 2016).

As a result, Johnson predicted, “It may be a hundred years before a computer beats humans at Go — maybe even longer.” (Johnson, 2016). Dr. Piet Hut, an astrophysicist and Go enthusiast at the Institute for Advanced Study in Princeton, N.J., agreed. In 1997, he declared, “If a reasonably intelligent person learned to play Go, in a few months he could beat all existing computer programs. You don’t have to be a (chess champion Gary) Kasparov... That was the prevailing wisdom.” (Cit: Johnson, 2016).

However, in March 2016, after a Google computer program called AlphaGo defeated the Go master Lee Se-dol, Hut admitted, “I was way off, clearly, with my prediction... It’s really stunning.”

But now, computers have the capacity to find patterns within the mass of information, so that, according to reporter Benedict Carey, “analysts (can) build a reliable catalog of digital patterns that provide meaningful ‘clues’ to the underlying reality, whether it’s the effect of a genetic glitch, a low-pressure zone or a drop in the yen.” (Carey, 2015).

However, the process of identifying patterns still must begin with the application of human gestalt. Significantly, in 2014, the Albert Einstein College of Medicine of New York hired conceptual artist Daniel Kohn, who was charged with the task of helping students develop their perceptual skills. “One thing I try to argue is that it’s not just about bigger machines to crunch more data, and it’s not even about pattern recognition. It’s about frameworks of recognition; how you choose to look, rather than what you’re trying to see.” (Kohn, 2015). In order not to drown in numbers, one must know what to look for. In this sense, this process is rather like proofreading. If you are looking for all grammatical errors at the same, you will surely miss some. But if you proofread looking for one type of grammatical error, you are more certain to find it. Of course, this means that a copyeditor must proofread multiple times — looking for each category of error.
Visual analytics is a digital technique that mirrors humans’ innate gestalt. According to Singer, Visual Analytics “offers animated interactive statistics online that help visitors spot trends on their own”:

In an uncharted world of boundless data, information designers are our new navigators. They are computer scientists, statisticians, graphic designers, producers and cartographers who map entire oceans of data and turn them into innovative visual displays, like rich graphs and charts, that help both companies and consumers cut through the clutter. These gurus of visual analytics are making interactive data synonymous with attractive data (Singer, 2011).

Analysis of Big Data refers to an approach designed to locate specific categories of information in a short amount of time. Big Data is a term that refers to a Body of Information (BOI) that can be selectively accessed and analyzed through digital technology. Big Data is divided into the following categories:

- Content
  - Social
  - Business
  - Entertainment
  - News
  - Educational
  - Economic
- Channels of Communication (e.g. Text, Data, Video, Graphics)
- Designated Information: Information that is transmitted through specific media (e.g. phone calls or fax transmissions) or to specific audiences
  - Undesignated Information:
    - Information directed to a broad audience
    - Personal Information
    - Information that does not stand for itself but is woven into an economic context (e.g. information about/from businesses or industries)

In addition, digital technology enables researchers to conduct cross-analysis with other data sets. To cite an example, economist Seth Stephens-Davidowitz examined Fame as a social phenomenon, focusing on the variable of “geographical origins” of celebrities. The data revealed that there was, indeed, a correlation between location and fame. One in 1,209 baby boomers born in California achieved celebrity status (as defined by an appearance in Wikipedia); in contrast, only one in 4,496 baby boomers born in West Virginia appeared in the publication (Stephens-Davidowitz, 2014).

Stephens-Davidowitz also factored in the variable of vocation and found that approximately 30 percent achieved fame through art or entertainment, 29 percent through sports, 9 percent through politics, and 3 percent through academia or science (Stephens-Davidowitz, 2014).

Cross-referencing also enables companies to customize their marketing appeals. Eric Bieschke, Pandora’s chief scientist, explains,

Because Pandora users provide their ZIP codes when they register, we can play ads only for the specific districts political campaigns want to target, and we can use their music to predict users’ political affiliations (Cit: Singer, 2014).

In addition, using various databases, scholars can now trace the appearance and frequency of Keywords throughout published works to furnish perspective into social movements, developments, and influences. Areas of study include:

- Etymology (Derivation of Language)
- Values Identification/Analysis
- Predictive Search
- Audience Identification Research
- Shifts in Culture
Jean M. Twenge, W. Keith Campbell, and Brittany Gentile have pointed out three ways that studying the uses of language in literature can provide insight into cultural change:

- **Individual (author’s) level** - Language use reflects the viewpoints of book authors, showing change in the values and attitudes of influential portions of the population.
- **Segments of the Population** - Books may mirror a market-driven assessment of what people want to read, capturing changes in the preferences of the population of Americans who read books.
- **General Population** - Language use in books may be a microcosm of the language use of people living in that time. For example, a fiction writer may aim to capture realistic modern dialogue (Twenge, Campbell, Gentile, 2012).

To illustrate, Fred Shapiro, Associate Director at the Yale Law School Library, discovered a printed reference to the term “African American” in a 1782 sermon, pushing the origins of the term back to the time of the American Revolution.

Shapiro’s discovery is a direct result of the existence of extensive databases that facilitate research “by gathering vast swaths of historical texts — once scattered across the collections of far-flung libraries and historical societies — in one easily searchable place.” (Cited: Schuessler, 2015).

The cultural significance of the term “African-American” lies in the categorization of this subculture within the tradition of other immigrant groups. Shapiro explains, “We think of it as a neutral alternative to older terms, one that resembles ‘Italian-American’ or ‘Irish-American’. It’s a very striking usage to see back in 1782.” (Schuessler, 2015). Moreover, Schuessler points out that the term “emphasizes their claim to being ‘American’ — a label which was applied to people of European descent living in the colonies by the end of the 17th century.” (Schuessler, 2015).

II. **Information Literacy examines the Association Between a Body of Information and Its Intended Audience(s)**

Understanding the many and complex connections between a Body of Information (BOI) and its audience is an essential aspect of the discipline of Information Literacy. Digital technology enables information to be customized to the interests of each member of the audience. For example, digitized window displays in malls are programmed to identify the pedestrians passing their store and promote items that may be of particular interest to that customer.

The following questions can provide insight into the association of a BOI and its intended Audience:

- **For whom is the Body of Information (BOI) produced?**
- **How do the experiences and perspectives of an individual audience member affect his/her interpretation of the Information?**
- **How does the choice of audience influence the strategy, style, and content of the body of Information?**
  - **What Information has been included and omitted in the Body of Information?**
  - **How have these choices affected the point of view of the BOI?**
- **Conversely - do the strategy, style, and content of the BOI provide insight into the intended audience(s)?**

**Audience Identification.** The discipline of Information Literacy can provide insight into the attitudes and values of the intended audience.

As Singer observes, this personal information addresses fundamental questions that answer basic business questions about their potential audience: “Are they legitimate? Are they worth pursuing? Are they worth spending money on?” (Singer, 2012).

**Audience Network** Information literacy also examines the formation of subcultures; that is, the connections between members of the audience. As Mark Wilson points out, “With more than two billion Internet users and more than six billion mobile phones in use, many in the world are extensively connected to each other and to information.” (Wilson, Kellerman, Corey, 2013). Marketers may even gauge the influence of an individual with others by ascertaining the number of “friends” the person has accumulated.

**For whom is the Body of Information (BOI) produced?**
Is there more than one intended audience?
Who is connected to each other?
Why are these Contacts connected to one another?
What are the points of commonality between the individuals who have been targeted to receive particular Information?
What shared values, experiences, and perspectives influence the audience(s)' understanding or interpretation of the BOI?

Impact of BOI on Attitudes and Behaviors
In the Information Age, personal information is considered a product, to be sold to those who use data to serve their own personal or professional objectives — often without the knowledge of the individual who is the focus of attention. Singer provides the following examples:

A bank that wants to sell its best customers additional services, for example, might buy details about those customers’ social media, Web and mobile habits to identify more efficient ways to market to them. Or...a sporting goods chain whose best customers are 25- to 34-year-old men living near mountains or beaches could buy a list of a million other people with the same characteristics. The retailer could...(then) manage a campaign aimed at that new group, testing how factors like consumers' locations or sports preferences affect responses (Singer, 2012).

An online ad customization technique, known as behavioral targeting, enables businesses to influence consumer behaviors and attitudes by crafting personalized messages, based on an individual’s social media activity, credit card histories and Web habits. Reporter Tanzina Vega offers the following illustration:

“If I have three different cars, how do I launch them to the right audience?” In milliseconds, fast technologies can determine whether a person is in the market for a new car or has bought a car recently, yielding different types of ads. One ad could focus on a new vehicle that a company is trying to promote to energy-conscious drivers, while another might focus on accessories for the car (Vega, 2013).

Behavioral targeting enables communicators to use information in the following ways:

- Anticipating audience behaviors
- Selecting information that appeals to the preferences and expectations of the intended audience.
- Devising strategies that generates an anticipated response from the audience.
- Disclosing how individuals feel about a subject.
- Eliciting immediate feedback from the audience.
- Building relationships with clients

Ethical Concerns
Thanks to digital technology, the traditional boundaries of privacy have been obliterated. The analysis of social media, credit card histories and Web habits provide insight into an individual’s political beliefs, religious faith, sexual orientation and other personal issues.

This ability to identify and access an individual’s private information has raised enormous legal and ethical questions. While Fordham Law School professor Joel R. Reidenberg acknowledges that there can be legitimate commercial needs for some businesses like ethnic restaurants, to know the race or ethnicity of consumers, “at the same time, this is ethnic profiling. The people... are being sold based on their ethnic stereotypes. There is a very strong citizen’s right to have a veto over the commodification of their profile.” (Cit: Singer, 2012).

In March, 2016, the U.S. government proposed a series of privacy rules that would, in some instances, make Internet providers like cable and phone companies ask individuals for their permission before using or sharing their Data. The Federal Communication Commission (FCC) also wants to institute rules that define the ways in which ISPs protect their Wire Service Data from breaches and how quickly they inform the public if the content is disrupted by a hacker (FCC, 2016).

III. Information Literacy can furnish insight into the Function of Information.
In addition to the network of contacts within this Information Society - Who is connected to each other — investigation of Network Societies can extend to why information is connected in this
complex world. Identifying the function (or purpose) of Information can provide insight into its uses: is it instruction, entertainment, historical content, or an artistic work?

*Manifest Function* refers to the primary reason(s) behind a communication activity. However, information may also contain a *Latent Function* (or functions) - instances in which the digital media communicator’s intention may not be immediately obvious to the audience.

At times, the Manifest Function may be subordinate to its Latent purposes. As an example, the 1955 animated version of George Orwell's *Animal Farm* was markedly different from the original novel. Journalist Laurence Zuckerman explains,

Many people remember reading George Orwell's *Animal Farm* in high school or college, with its chilling finale in which the farm animals looked back and forth at the tyrannical pigs and the exploitative human farmers but found it impossible to say which was which.

That ending was altered in the 1955 animated version, which removed the humans, leaving only the nasty pigs.

Another example of Hollywood butchering great literature? Yes, but in this case the film’s secret producer was the Central Intelligence Agency.

The CIA, it seems, was worried that the public might be too influenced by Orwell’s pox-on-both-their-house critique of the capitalist humans and Communist pigs. So after his death in 1950, agents were dispatched (by none other than E. Howard Hunt, later of Watergate fame) to buy the film rights to *Animal Farm* from his widow to make its message more overtly anti-Communist (*Zuckerman*, 2000).

Thus, while the manifest function of the film was *entertainment*, the latent function was *political persuasion*, or *propaganda*.

Some common Information Functions include the following:

*Expression* Occasionally, speakers inform the listener of their frame of mind—what they are thinking at that moment, how they are feeling, or their attitudes toward people and issues.

*Description* can involve elaboration on general statements, providing concrete examples and details.

*Instruction* refers to occasions in which the audience benefits by exposure to Information that they find to be of personal benefit. Thus, the purpose is either 1) to inform others about a subject with which they are unfamiliar or 2) to furnish *additional* information about a subject with which the audience is already acquainted. This Function occurs in educational situations, in intra-generational conversations, and in journalistic settings. Innovations in media technology have created a range of channels through which the news is delivered, including print newspapers, radio, television, the Internet, and mobile devices.

*Persuasion* is a function in which the communicator’s objective is to promote a particular idea or motivate the audience to change specific behaviors or attitudes. In this case, information has a political function, emerging as a means of attaining and preserving power. Advertising also attempts to persuade the intended audience to think positively about their product and, ultimately, to purchase their brand.

In addition, persuasion is also the primary goal of *propaganda*. In addition to formal instances of propaganda, many media presentations (e.g., films or television programs) can have an *indirect* propagandistic function, conveying exciting and/or flattering messages about America.

*Creative expression*. Novelists, painters, and experimental videographers express themselves through their art and share their artistic vision with the audience. Thanks to digital technology, independent artists and non-professionals have the means to produce, edit, and distribute their works of art.

*Profit* Unbeknown to the individuals engaged in conversations on Social Media sites such as Facebook, Twitter and Foursquare, interested parties are eavesdropping on these chats and selling personal information to companies interested in doing business with these individuals. As Mark LaRow, senior vice president for products at the software company MicroStrategy, asserts, “This is like the biggest focus group someone could ever imagine.” (*Citation: Clifford*, 2012). For example, Facebook’s App makes it convenient for the legion of Facebook participants to post information about themselves. But at the same time, companies are able to gather information about what current or potential customers do and like, or what rich customers prefer versus poorer ones. Reporter Stephanie Clifford provides the following examples of market research applications of social media:
When Wal-Mart wanted to know whether to stock lollipop-shaped cake makers in its stores, it studied Twitter chatter. Estée Lauder’s MAC Cosmetics brand asked social media users to vote on which discontinued shades to bring back. The stuffed-animal brand Squishable solicited Facebook feedback before settling on the final version of a new toy. And Samuel Adams asked users to vote on yeast, hops, color and other qualities to create a crowdsourced beer, an American red ale called B’Austin Ale that got rave reviews (Clifford, 2012).

Moreover, social media sites can gauge consumers’ levels of interest in a company’s goods or services. As Stephanie Clifford observes, “(A social media site) sets baselines for what a normal level of buzz around, say, electronics or toys is, so it can measure when interest is getting high.” (Clifford, 2012).

Over time, market research tools have become increasingly specialized. For instance, Wal-Mart has opened a unit, called @WalmartLabs, that is dedicated exclusively to the analysis of digital clues such as Twitter posts, public Facebook posts and search terms on Walmart.com, that helps Wal-Mart decide what merchandise to carry and the best locations for particular goods and services.

In addition, a number of companies rely upon E-scores, an online calculation that measures the potential value of customers by accurately predicting spending. Singer explains,

(E-scores) can take into account facts like occupation, salary and home value to spending on luxury goods or pet food too predict “which customers will visit again, what products will interest them and which special offers will appeal to them. These scores can determine whether someone is pitched a platinum credit card or a plain one, a full-service cable plan or none at all. They can determine whether a customer is routed promptly to an attentive service agent or relegated to an overflow call center (Singer, 2012).

This software employs a formula that factors in occupation, salary and home value to project personal spending on a range of items. Elizabeth Francis, chief marketing officer of the Gilt Groupe, observes, “It tells us exactly what customers are interested in. It’s amazing that we can get that kind of real feedback, as opposed to speculating.”

Control Digital technology has emerged as a way to assert and/or maintain political power. In 2015, the following developments came to light:

- The United States has been actively spying on Germany and other allies. Wikileaks disclosed that National Security Agency had been intercepting German Chancellor Angela Merkel’s cell phone communications (Gardian, 2015).
- More than a dozen governments, including Turkmenistan, Brunei and Bahrain have been targeting its political dissidents. The reports disclosed that by 2015, the market for “off the shelf” spy software has grown to $5 billion a year (Perlroth, 2012).
- An obscure 1986 communications law entitles the U.S. federal government to read any of its citizens' emails that are over six months old without a warrant. The ‘180-day rule extends Fourth Amendment protections against unreasonable search and seizure only to electronic communications sent or received fewer than 180 days ago. Consequently, the government can treat any emails, text messages or documents stored on remote servers - popularly known as the cloud - as ‘abandoned’ and therefore accessible using administrative subpoena power (Weber, 2015).

IV. Historical Context

Because many popular media presentations derive their meaning from the historical events of the day, the sudden appearance (or disappearance) of information can furnish perspective into the historical period in which it was produced.

Examining a BOI from a different era can furnish perspective into the period in which it was produced. Jean-Baptiste Michel, co-founder of Google Books Ngram Viewer, discusses his project in these terms:

We wanted to create a scientific measuring instrument, something like a telescope, but instead of pointing it at a star, you point it at human culture...Digitized data is really powerful when it becomes long enough over time so you can see trends in society and culture that you could not see before. You are getting a whole new vantage point on something (Cit: Singer, 2013).

As an example, in 2011, J.-B. Michel and his research team studied the impact of the past on
contemporary society by tracing references in books to specific time periods. References to “1880,”
which peaked in that year, fell by half by 1912, a span of 32 years. In contrast, references to “1973”
deprecated to half its peak by 1983—only 10 years later. “We are forgetting our past faster with each
passing year,” the authors concluded (Michel, 2011).

Moreover, studies focusing on the absence of words and phrases can also provide insight into
historical eras. Singer provides an example about notable absences of words in Nazi Germany as an
indication of political repression under that regime:

To detect censorship in Germany under the Nazis, for instance, they tracked the mentions and omissions of
well-known artists — reporting that Marc Chagall’s full name surfaced only once from 1936 to 1943 in the
German book records, even as this Jewish painter’s name appeared with increasing frequency in English texts (Michel, 2011).

Analyzing patterns of information over a long period of time can also furnish perspective into
culture. To illustrate, studies designed to gauge the effectiveness of a 1990s Anti-poverty program,
“Consider Moving to Opportunity,” that provided housing assistance for low income families,
initially found that the effectiveness of the program was “disappointing,” finding little or no
improvements in test scores for children or earnings for adults.

However, the researchers, Harvard economists Raj Chetty, Nathaniel Hendren and Lawrence
F. Katz continued to monitor the test scores of the children involved in the program for another
decade. This study revealed that their earnings as adults actually exceeded others in their original
demographic categories (Chetty, Hendren & Katz, 2015).

In addition, Information Literacy can identify attitudes toward historical events. To illustrate,
in 2015, a Stanford University research team successfully conducted a data mining project,
“Mapping Emotions in Victorian London,” which mapped the British capital’s “emotional
geography” by categorizing what feelings or sensations common settings conveyed in the novels of
Dickens, Thackeray, Austen and other 19th-century authors (Blumenthal, 2015).

In addition, because the American media industry relies so heavily on cultural trends as the
raw material for programming, entertainment programs frequently anticipate historical events.
To illustrate, a 1990 study found that pessimistic lyrics in Top 40 songs predicted an economic
decline about two years later (Belluckjan, 2014). To cite another example, a 1999 study found that
when social and economic conditions were bad, movie actresses with “mature facial features” —
small eyes, thin cheeks, large chins — were popular, but when conditions were good, the public liked
actresses with childlike features (Belluckjan, 2014).

Conversely, an understanding of historical events can furnish perspective into a Body of
Information. The more that individuals know about an event, the better equipped they are to assess
the BOI. As an example, the lineup of sponsors of the broadcast of the 2009 Superbowl may well be
puzzling to someone unacquainted with events surrounding the broadcast. Instead of the usual ads
for “big ticket” items such as cars, the 2009 sponsors consisted largely of online employment
companies such as Cash for Gold.com, Careerbuilder, and Monster.com. However, this mystery may
be explained by recalling that the event took place in the midst of the “Great Recession,” when
Superbowl viewers might not have the disposable income for expensive items and instead, might be
more responsive to ads for services offering financial relief.

Applying the following questions related to Historical Context can provide insight into Bodies
of Information (BOI):

- What does the Information tell us about the period in which it was produced?
  a. When was this Information first presented?
  b. How has Information been influenced by the events of the day?
  c. Does the Information comment on the events of the day?
- Does an understanding of historical events provide insight into Content? (i.e., Information
  originating during a particular historical period)
  a. What events were occurring when the presentation was produced?
  b. How does an understanding of these events furnish perspective into the Content?
- Historical References
  a. Are there historical references in the Information?
b. How does an understanding of these historical references affect your understanding of the Information?
   - Did the appearance of this Information anticipate or foreshadow any political or historical events? Explain.
   - Did the presentation play any role in shaping the events of the day? Explain.
   - In the case of entertainment programming, how accurately does it present historical events?
     a. Is the account an accurate portrait of events? Compare the account with historically accurate accounts of the event or period.
     b. Are the causes leading to the events in the presentation clear?
     c. What were the consequences of the dramatized events?
   - In the case of a news story, how much historical context has been provided?
   - Where would you find the answers to these unanswered questions? (Silverblatt, 2014).

V. Cultural Context

Information Literacy can serve as a text that reflects, reinforces, and shapes cultural attitudes, values, behaviors, preoccupations, and myths. As an example, Taykey, an Israeli startup, is designed to connect clients’ products to cultural trends, by conducting “semantic analysis across the web in real time to find out what’s trending for your (sic) demographics at any given moment, and automatically deliver your ad there.” (Taykey).

Worldview: What kind of world is being depicted in a particular Body of Information? Narratives such as novels, advertisements, and political communications present complete worlds, populated by certain types of people and operating according to a clear set of values and procedures. Consequently, applying the following questions related to Worldview can be a valuable key to discovering manifest and latent messages contained in a BOI.

Worldview: What kind of world is depicted in the BOI?
   - What culture or cultures populate this world?
     a. What kinds of people populate this world?
     b. What is the ideology of this culture?
   - What do we know about the people who populate this world?
     a. Are characters presented in a stereotypical manner?
     b. What does this tell us about the cultural stereotype of this group?
   - Does this world present an optimistic or pessimistic view of life?
     a. Are the characters in the presentation happy?
     b. Do the characters have a chance to be happy?
   - Are people in control of their own destinies?
     a. Is there a supernatural presence in this world?
     b. Are the characters under the influence of other people?
   - What hierarchy of values can be found in this worldview?
     a. What embedded values can be found in the people who appear in the BOI??
     b. What does it mean to be a success in this world?
       1) How does a person succeed in this world?
       2) What kinds of behavior are rewarded in this world?

Obviously, most non-narrative BOIs (e.g. a telephone directory) provide an incomplete Worldview. But some of these questions may, indeed, apply.

Culturomics refers to the quantitative analysis of social sciences and humanities that provide a fresh perspective into culture. Reporter Steve Lohr explains,

It is this ability to collect, measure and analyze data for meaningful insights that is the promise of Big Data technology. In the humanities and social sciences, the flood of new data comes from many sources including books scanned into digital form, Web sites, blog posts and social network communications (Lohr, 2013).

Thus, the field of Culturomics can be broken into the following fields: Political Methodology (Political Science) Cliometrics (History), and Literary Studies (Stylometry).

To illustrate, a study by Twenge, et. al, examined the rise of Individualism in American culture by charting the appearance of “individualistic” and “communal” words in literary works. First, they tallied the appearance of the following individualistic words: independent, individual, individually, unique, uniqueness, self, independence, oneself, soloist, identity, personalized, solo, solitary,
personalize, loner, standout, single, personal, sole, and singularity. They then recorded the frequency of the following communal words: communal, community, commune, unity, communitarian, united, teamwork, team, collective, village, tribe, collectivization, group, collectivism, everyone, family, share, socialism, tribal, and union.

Between 1960-2008, the appearance of individualistic words did, indeed, increase in American books, while the rate of appearance of communal words remained constant over the same period. The researchers concluded,

> We believe these data provide further evidence that American culture has become increasingly focused on individualistic concerns since 1960... Thus, America today is culturally distinct from America in 1960—at least in the realm of individualism (Twenge, Campbell & Gentile, 2012).

**Social Media as Cultural Text** Social media conversations currently are being “mined” to disclose cultural trends and information about individuals and events. To illustrate, in the aftermath of the bomb massacre that took place during the 2013 Boston Marathon, a popular narrative emerged about the perpetrators, Tamerlan Tsarnaev and his younger brother, Dzhokhar. The Boston Globe reported,

A picture has begun to emerge of 26-year-old Tamerlan Tsarnaev as an aggressive, possibly radicalized immigrant who may have ensnared his younger brother Dzhokhar — described almost universally as a smart and sweet kid — into an act of terror... But what about that image of Dzhokhar as sweet? (Blow, 2013).

Within days, digital news outlets BuzzFeed and CNN claimed to verify Dzhokhar’s Twitter account. New York Times columnist Charles M. Blow examined Dzhokhar’s tweets and discovered attitudes that contradicted this image:

- Dzhokhar tweeted quite a bit about women, dating and relationships; many of his musings were misogynistic and profane.
- (Dzhokhar) was a proud Muslim who tweeted about going to mosque and enjoying talking — and even arguing — about religion with others. But he seemed to believe that different faiths were in competition with one another. On Nov. 29, he tweeted: 'I kind of like religious debates, just hearing what other people believe is interesting and then crushing their beliefs with facts is fun.'
- (Dzhokhar) was apparently a 9/11 Truther, posting a tweet on Sept. 1 that read in part, ‘...It’s hard for many of you to accept that 9/11 was an inside job. (Blow, 2013).

Online posts can also reveal shifts in outlook and attitudes. As Blow points out, “Toward the end of last year, the presence of dark tweets seemed to grow — tweets that in retrospect might have raised some concerns.

- Oct. 22: I won’t run. I’ll just gun you all out #thugliving.
- Jan. 5: I don’t like when people ask unnecessary questions like how are you? Why so sad? Why do you need cyanide pills?
- Jan. 16: ‘Breaking Bad’ taught me how to dispose of a corpse.
- Feb. 2: Do I look like that much of a softy?... Little do these dogs know they’re barking at a lion.
- Feb. 13: I killed Abe Lincoln during my two hour nap #intensedream (Blow, 2013).

Digital analysis can also focus on Sentiment Analysis: that is, how individuals feel about a particular topic. As Stephanie Clifford explains, “... If people overwhelmingly dislike a new video game, ordering pallets of the game is not a great bet.” (Clifford, 2012) By identifying keywords, services like Sentiment Metrics or Radian 6 can help a company track how it is being discussed online.

**VI. Information Literacy** provides ways to ascertain the legitimacy of information.

How do you assess the veracity of information in our digital environment?

Because of the open nature of the digital domain, the information available is, to be kind, uneven. In traditional print venues, much of the content has been subjected to a stringent review
process to verify the validity of the content. Newspaper reporters and book authors routinely work in tandem with editors to insure accuracy. In like fashion, scholarly articles generally go through a rigorous peer review process. However, no such process exists with respect to the content that appears on the Internet.

As a result, it can be instructive to apply the following questions to the materials that comprise a BOI:

- Is the information verifiable?
- Is the content supported by evidence?
- Is the information current?

When was the information first published? When was the site updated? The date of the last revision usually appears at the bottom of the home page. But if the publication date remains unclear, the material could be outdated and therefore should be discarded.

- Is the information accurate?
  a. Does the BOI contain any errors or misrepresentation of facts?
  b. Is the narrative based on any false assumptions?

- Is the information complete?
  Understanding what information has been included and/or omitted can furnish perspective into the point of view of the person or organization selecting the information.

- What are the sources of information?
  If a communicator relies on sources, the audience should be alert with regard to the following:
  a. Expertise: Is the source an authority on the subject at hand?
  b. Motive: Why is a source willing to contribute to the BOI?
  c. Point of View: What perspective does the source (or sources) represent?
- Is the content consistent?
  J. Ormondroyd declares, “The consistency test simply requires that the argument or information does not contradict itself. Sometimes when people spin falsehoods or distort the truth, inconsistencies or even contradictions show up. These are evidence of unreasonableness (Ormondroyd, Engle, & Cosgrave, 1996).

- Is the information corroborated?
  Ormondroyd poses the following questions: “Does the work update other sources, substantiate other materials you have read, or add new information? Does it extensively or marginally cover your topic?
  You should explore enough sources to obtain a variety of viewpoints (Ormondroyd, Engle, & Cosgrave, 1996).

Finally, assessing the legitimacy of Information can also be complicated by adherence to the principle of Objectivity. The American Society of Professional Journalists’ Code of Ethics declares,

Good faith with the public is the foundation of all worthy journalism.
1. Truth is our ultimate goal.
2. Objectivity in reporting the news is another goal which serves as the mark of an experienced professional. It is a standard of performance toward which we strive. We honor those who achieve it (Society...).

However, this code assumes that: 1) an Absolute Truth exists; and that 2) journalists are in a position to present this ideal Truth without personal bias or distortion.

But although a fact may be accurate, it may not be true. As legendary newspaper commentator Walter Lippmann has observed, news only approaches Truth in cases of quantifiable
information, such as the temperature, sports scores, and election results. But even in these cases, information can be far from absolute. For instance, a weather report can only accurately measure the specific place where the temperature is being calibrated. Variables such as the amount of green space in the region versus densely constructed areas that retain heat can cause a fluctuation of several degrees in temperature within a thirty-mile radius.

However, audience members often confuse fact with Truth. As an example, in July 2012, the following headline appeared in the New York Times: “Syria Moves Some Chemical Weapons, U.S. Says” (Schmitt, 2012). But although it is a fact that American officials made this comment, the statement is not necessarily true.

Context can also determine whether a statement of fact represents either a partial or whole truth. Author Cynthia Crossen has cited several instances in which advertisers have manipulated numerical data to promote the merits of their products:

- A Levi’s ad cites a survey, in which ninety percent of college students say Levi’s 501 jeans are ‘in’ on campus. However, close examination reveals that the students chose from this list:
  - Levi’s 501 jeans;
  - T-shirts with graphics;
  - 1960s-inspired clothing;
  - Lycra/spandex clothing;
  - Overalls;
  - Patriotic-themed clothing;
  - Decorated Denim;
  - Printed pull-open beach pants;
  - Long-sleeved hooded T-shirts; and
  - Neon-colored clothing.

In other words, there was no way to vote for blue jeans except Levi’s 501’s. (Crossen, 1994).

- A commercial for USAir points out that their airline had the best on-time record of ‘any of the seven largest airlines’. However, a careful examination finds that USAir had arbitrarily stopped counting at seven; the eighth-largest airline, Pan Am, actually had the best on-time record of all of the airlines (Crossen, 1994: 75)

- A survey conducted by New York City area Dodge dealers found that most owners of Toyotas, Hondas, Fords and Chevrolets actually preferred the Dodge Shadow...100 people were surveyed, all owners of older models of one of the other cars...The only new vehicle they were allowed to drive was the Dodge Shadow. Not surprisingly, more than 70 percent preferred the Dodge. Crossen declares, “(These) surveys contradict the actual proof of what people prefer: their purchases.” (Crossen, 1994: 76–77).

Thus, although the meaning of a number is objective, the use of numbers in research can be subjective.

Of course, facts are manipulated in the political arena as well. To illustrate, in December 2015, Republican presidential hopeful Ted Cruz declared that Democrats are soft on crime because “an overwhelming majority of violent criminals are Democrats”:

Now listen, here’s the simple and undeniable fact. The overwhelming majority of violent criminals are Democrats...The Democrats for years have been viewed as soft on crime, because they go in and they appoint to the bench judges who release violent criminals. They go in and fight to give the right to vote to convicted felons. Why? Because the Democrats know convicted felons tend to vote Democrat (Cit: Hopper, 2015).

A spokesperson for the Cruz campaign explained that the Senator was referencing a study that had examined ex-felons’ voter registration records and turnout in three states-North Carolina, New York and New Mexico.

When ABC News asked Cruz about these remarks, he said he was “engaging in a process called Reasonable Inference:”
An inference is actually rational reasoning, which people do all the time. When elected Democrats push to give felons the right to vote, it is a perfectly rational and reasonable inference to say those Democrats understand that the overwhelming majority of violent criminals vote Democratic (Cit: Hopper, 2015).

This study, indeed, confirmed that most ex-felons who registered to vote had identified their party affiliation as “Democratic.” However, as a practiced debater, Cruz knows that the reasonable part of this definition requires that the inference is, in fact, a “logical” explanation of the facts. Instead, Cruz’ statement is an example of “Unreasonable Inference,” in which the facts are manipulated to support his political agenda. Cruz draws the following conclusions from the study:

- Membership in the Democratic Party plays a central role in the violent crimes committed by these individuals.
- Elected officials appoint "senior Justice Department officials" and lawyers who "lionize" and "glorify" cop killers.
- Democrats are soft on crime because “an overwhelming majority of violent criminals are Democrats.”

However, other possible inferences (which could be reasonable or unreasonable) include the following:

- The majority of imprisoned Americans are members of minority groups who regard the Democrats as the more likely political party to provide support, direction, and assistance for themselves and others in similar circumstances.
- Traditionally, the families of these prisoners tended to vote for Democratic candidates.
- These prisoners supported individual Democratic candidates, based on their positions on issues unconnected to crime, such as same sex marriage or climate change legislation.

Significantly, the political leaders, marketing specialists, and advertisers who deliberately manipulate facts are not only instructing the public what to think but also how to think. Consequently, citizens must carefully scrutinize statements by politicians and others in the public arena to see for themselves how communicators have chosen to use facts.

Rather than Objectivity, a more realistic and constructive set of principles with which to assess a Body of Information may be Transparency, Perspective, Judgment, and Fairness. Questions to apply to a BOI, then, include the following:

- Is the information presented fairly?
- Are all perspectives of a story represented?
- If so, are there any differences in the way in which various perspectives have been represented?

VII. Understanding the Capacity of a Medium to Convey Particular Kinds of Information.

The final Line of Inquiry represents a direct convergence with the Production Analysis Approach to media literacy analysis, which examines a Body of Information in terms of its presentation of the content (Silverblatt, 2014). This approach is based on the supposition that the production decisions employed in the construction of media presentations convey distinct messages. Thus, production elements such as editing (what to include or omit), camera angle, color, and selection of images can reinforce the manifest message of the media communicator or convey independent, latent messages. As an example, the “shaky-cam” camera technique commonly employed in television commercials has an amateur appearance, conveying the impression that the program is spontaneous and authentic. Advertisers hope that this message of authenticity will be transferred, so that the audience believe what they are “told” about the product.

In addition, production elements can affect the audience’s receptivity to its content. Production elements are affective in nature; that is, audience members respond emotionally to elements such as lighting, color, camera position, and editing. For instance, media scholar Herbert Zettl maintains that the violent style found throughout American entertainment programming reinforces the violent content found in the programs:
It is of little surprise, therefore, that even ‘media-literate’ observers, while watching a hockey game with their children, might become concerned about promoting violence only when the game becomes especially rough or when the players begin to fight. However, they may not have noticed the perceptual violence of a series of quick zooms and high-volume sounds in the preceding cartoon of frolicking birds in a park.

...Television violence should now include aesthetic criteria, which may well reveal that aesthetic violence in an otherwise tranquil scene may be more damaging to the viewer than a fistfight between the good guys and the bad guys (Zettl, 1998).

Thus, the more welcoming the style of the presentation—such as putting information into rhymes, avoiding jargon that is difficult to pronounce, and employing visually friendly fonts—the more inclined people are to accept the content.

Each medium is defined by a set of distinctive characteristics that make it uniquely well suited to present certain types of information. To illustrate, in one of her weekly columns, Margaret Sullivan, Public Editor of the New York Times, cited a Letter to the Public Editor from David N. Schwartz, a reader who contended that there wasn’t a single “news story” on the front page of the November 26, 2014 edition of the New York Times. After conducting some research, M. Sullivan agreed with Schwartz’ assessment: “In general, I found an emphasis on interpretive and enterprise journalism. I also found many examples of interesting and well-written articles with little news value.” (Sullivan, 2014).

Sullivan then brought this observation to the attention of Managing Editor Dean Baquet, who agreed with Schwartz’ observation: “There’s no question that there’s less traditional news on the front than there used to be.” Baquet then explained, “One major reason... is that readers have constant access to breaking news.” (Cit: Sullivan, 2014). Baquet is making the point that, because of the ongoing nature of breaking news on the Internet, print media now are free to assume a “second-day” approach, selecting stories that put these events into perspective, opinion pieces, or articles that provide the “backstory” of a news story.

The following factors contribute to the distinctive characteristics of a channel of mass communication:

- The Senses involved in receiving information affect people’s ability to assimilate certain kinds of information of a medium, as well as the ways in which they respond to the content.
- The Pace of the presentation, which refers to the rhythm or rate at which information should be assimilated.
- The Environment in which the medium is presented can affect how an individual responds to a media presentation.
- Dissemination Patterns, which refer to 1) the amount of time it takes for information to be conveyed through a particular medium, and 2) the route that it takes to get to the public.

For instance, video coverage of the terrorist bombing in Belgium in March, 2016 presented events as they unfolded; at the same time, print coverage provided insight into essential context behind the attack.

Indeed, using an inappropriate medium to send a particular type of message may interfere with the communication process. Thus, to return to our example, relying on video to explain the geopolitical issues leading to the attack may only have confused the viewer. Consequently, one of the principles of media literacy involves the value of a balanced media diet, in which the audience uses media in combination to take advantage of the distinctive attributes of each medium to provide the audience with a comprehensive understanding of the news story.

Finally, a medium may lend itself to an individual’s particular learning style. For instance, dyslexia is a condition that impairs the brain’s ability to process written symbols. Consequently, dyslexic individuals who struggle with written communication often gravitate toward visual communications, such as photography and video.

4. Conclusion
Thus, the discipline of Information Literacy focuses attention on the most effective presentation of Information, based on: 1) the most suitable medium, given the nature of the BOI; and 2) the most effective channel for communicating with an individual audience member.
The following questions can provide insight into the impact of production elements on the presentation of a Body of Information:

- What production choices have been made by the media communicator?
- What messages are conveyed by these production choices?
- How do these production elements reinforce/convey media messages?

**Production Elements**

a. **Editing**
   1) What information has been included?
   2) What information has been omitted?

b. **Color:** What meaning(s) are associated with the colors in the media presentation?

c. **Lighting**
   1) To what aspects of the media presentation does the lighting call attention?
   2) What messages are conveyed by the use of light and shadow?

d. **Shape**
   1) What shape(s) appear in the media presentation?
   2) What message(s) are conveyed by shape in the media presentation?

e. **Scale:** What theme(s) are conveyed by the relative size of objects in the presentation?

f. **Relative Position:** What message(s) are conveyed with regard to the relative position of objects in the presentation?

g. **Movement**
   1) What is the direction of movement in the media presentation?
   2) What does this movement signify?

h. **Angle**
   1) What angle(s) are employed in the media presentation?
   2) What messages are conveyed by the angle(s)?

i. **Connotation**
   1) Words
      a) What is the connotation of words found in the media presentation?
      b) How does the appearance of these words affect the message(s) in the media presentation?
   2) Images
      a) What is the connotation of images found in the media presentation?
      b) How does the appearance of these images affect the message(s) in the media presentation?

j. **Performance**
   a) How do Nonverbal performance elements affect the meaning(s) in a presentation?
   b) How do Verbal performance elements affect the meaning(s) in a presentation?

k. **Sound Elements**
   1) How does Music reflect/reinforce/shape meaning in the presentation?
   2) How does Dialogue reflect/reinforce/shape meaning in the presentation?
   3) How does Background Sound reflect/reinforce/shape meaning in the presentation?

**References**

Society - Society of Professional Journalists’ Code of Ethics.spj.org