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ABSTRACT

This research focuses on the importance of learning media literacy skills through simple production techniques on a video camera versus digital editing on a computer. It describes the results of analog and digital production groups and investigates the educational experiences with media. This qualitative and participatory research study conducted in Hingham, Massachusetts and Madison, Wisconsin from the spring of 2001 through the summer of 2001. There were 3 groups of 39 participants from K-12 background and they wanted to integrate video production and media literacy into their curriculum. The study examines how participants' teaching approaches are affected by different media production activities. It addresses their response to the use of video production in developing media literacy skills in the curriculum, and documents the pedagogical experiences of these educators who want to integrate new media and technologies into their curriculum. Results address issues about how by engaging in media production activities, participants experience the difficulties and unique characteristics of media production. (Author/AEF)

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Analog and Digital Video Production Techniques in Media Literacy Education¹

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KEYWORDS: video production, digital video, media education, media production, media literacy.

ABSTRACT

Although media production is considered to be a time consuming, difficult, and expensive process, educators are increasingly presented with opportunities to integrate media production into their curriculum. This process is generally considered valuable in order to prepare new generation for living in a media-rich culture. To do this investigation on a large scale in education requires that media production must be simple and central to the learning process rather than just being technical or peripheral.

The research seeks to promote media literacy skills through analog and digital production techniques and to draw on the natural links between media literacy education and media production.

This research focuses on the importance of learning media literacy skills through simple production techniques on a video camera versus digital editing on a computer. It describes the results of analog and digital production groups and investigates the educational experiences with media.

This qualitative and participatory research study conducted in Hingham, Massachusetts and Madison, Wisconsin from the spring of 2001 through the summer of 2001. There were three groups of 39 participants from K-12 background and they wanted to integrate video production and media literacy into their curriculum.

The study examines how participants' teaching approaches are affected by different media production activities. It addresses their response to the use of video production in developing media literacy skills in the curriculum, and documents the pedagogical experiences of these educators who want to integrate new media and technologies into their curriculum. Results address issues about how by engaging in media production activities, participants experience the difficulties and unique characteristics of media production.

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The participants were asked to produce the same technique, transition, and special effect using either a video camera or digital editing software. Their responses to the experience were evaluated with a media survey, questionnaires, and interviews. In addition, the effects of the methods were compared and evaluated through an assessment of their video projects.

The study explores three key variables in order to understand the educational experiences of participants: 1) the wide range of meanings participants associate with media education; 2) the impact of video production activities on their understanding of media; and 3) the ways in which they integrated media production in their lesson plans.

INTRODUCTION

Currently, limited research is available dealing with the effects of digital media production in the classroom. Few studies look specifically at the impact of media production in media literacy education. This study attempts to fill the gap to outline the natural links between education and communication through this medium. Especially for adults, there is no current study that approaches this subject from the point of view of the adult learners themselves.

By increasing knowledge about media literacy issues and how to integrate media production into the curriculum, this study outlines the knowledge about how to design media production activities in the classrooms, and about classroom-based research.

As an outcome of this study, the participants improved their own media literacy and media production skills as part of the learning process.

I have been teaching media literacy and video production for over seven years. First I taught analog video production to 9-12 graders. Currently, I teach K-12 educators. "digital" video production using digital editing software Adobe Premiere. In my experience, I have seen transformation in my students' responses to the media whatever the age level they are. "I cannot watch the TV the way I used to," has been a common response from my students.

In my teaching experience, I observed students feel more creative and productive while working on video production. "Seeing is Believing, Not!: Video Magic" was the name of the exercise given to the participants in order to create magic with the camcorder and computer groups produced the same techniques using digital editing software.. For instance, it is impossible to transform a penny into a hundred dollar bill in real life, but with the help of camera tricks, the participants put a penny into the palm of the person and opened up with a hundred dollar bill. Another example is with rotating the camera

to videotape someone doing a push up on the wall with one finger. It looks like the person is doing the push up on the floor.

This research investigates where the “magic touch” is in responses to the media. Is it in learning the basic techniques of the camera production, or is it in learning to create those techniques on digital editing? This research isolated the process of video production from pre-production in video camera to post--production exercises in digital editing in order to find out which part contributes what impact on media education.

Media Literacy was defined at the Aspen Institute in 1989 as “ability to access, analyze, communicate, and produce media in a variety of forms.” Media literacy is more than asking students to simply decode information that they experience in the media, but they must be able to talk back and produce media. With the help of new media and technologies, students will have more access and power to communicate and produce their own projects, presentations, and portfolios and share them with other students around the world.

As Renee Hobbs states in her article “The Seven Great Debates of Media Literacy Movement”, the production in the classroom is one of the seven debates in media literacy education. Although media production is considered a time consuming, difficult, and expensive process, with simple video production techniques, educators will be able to reach their teaching goals. Media production activities are an essential component of media education in the classroom. These activities can be designed based on our objectives and the resources available in our schools. In order to be considered literate one must be able to not only read but also write. Media literate person must be able to both decode (reading) and construct (writing) media. In media literacy education, media analysis needs to be integrated with media production.

RESEARCH DESIGN

The following research questions serve as a guiding principle in the analysis of the data, and they are integrated into the qualitative interview/ questionnaire structure.

1. AUDIENCE--What are the participants' personal experiences in the area of production during their education? Are there common experiences and or factors affecting their lives and academic work?
2. PROBLEMS--Do they share common problems in the area of production? Are there common themes when discussing those problems and their possible solutions?
3. SUGGESTIONS--What are their suggestions for improving the learning of the media through production? Are there common themes when discussing improvement for schools and teaching?
4. MEDIA LITERACY--What is media literacy? What does it mean to be a media literate person dealing living in a media rich culture? Are there common categories/ themes in discussing their learning experiences?
5. PRODUCTION STYLES--How does different media production approaches effect media literacy education? Which medium (analog or digital) provides better understanding of media?
6. DESIGN--Is it possible to teach media literacy skills through media production? What type of course/ workshop design will be necessary for teaching media literacy through media production? How to design it?
7. MEDIUM-- Medium is the message? What are advantages and disadvantages of the each medium (camera, computer) in media education?

METHODOLOGY

Methodology includes analysis of media survey, questionnaires, transcripts of interviews, field notes derived from on-site classroom observations, in class and online participation (blackboard.com), video production exercises, and midterm and final projects.

Computer groups (CO) and Camera Groups (CA) were given 8 video production techniques to produce in their video magic activity.

Table 1: The comparison Chart for CA and CO groups.

CA: Camera Group	CO: Computer Group
On video camera editing	On computer editing
Analog	Digital
On camera editing	On computer software
Used analog video camcorders only one digital camera as a digital camera.	Used digital editing software on computer. Software called Adobe Premiere.
Linear editing	Non-linear editing

For each technique, there are two or three hypothesis and predictions are generated. Participants' group projects are watched and analyzed. CA groups' projects were on videotapes, and CO groups' projects were on computer files. Their videos were each viewed based on these hypothesis and predictions. All their responses put in a spreadsheet program as seen on the following graphic. If the groups produced and integrated the techniques into their video, they have received "1" as a score. If they did not integrate the techniques, they have received "0" as a score.

List of video production techniques included in the study.

- | |
|--|
| <ol style="list-style-type: none"> 1. Using Camera Lens- Zoom in/ zoom out and Close up 2. Shaky Camera- Rotate the Scene and Change Orientation 3. Cut and Jump cut 4. Transitions-Swish pan and Soft wipe---Match action/ color/ shape/ texture by focus/ defocus and fade to black. 5. Special Effect- Filter/ Blur 6. Special Effect- Key hole- Adding Credits, Title, Graphics and Text 7. Voice Over/ Music 8. Animation |
|--|

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Chart 1: Sample of a spreadsheet data.

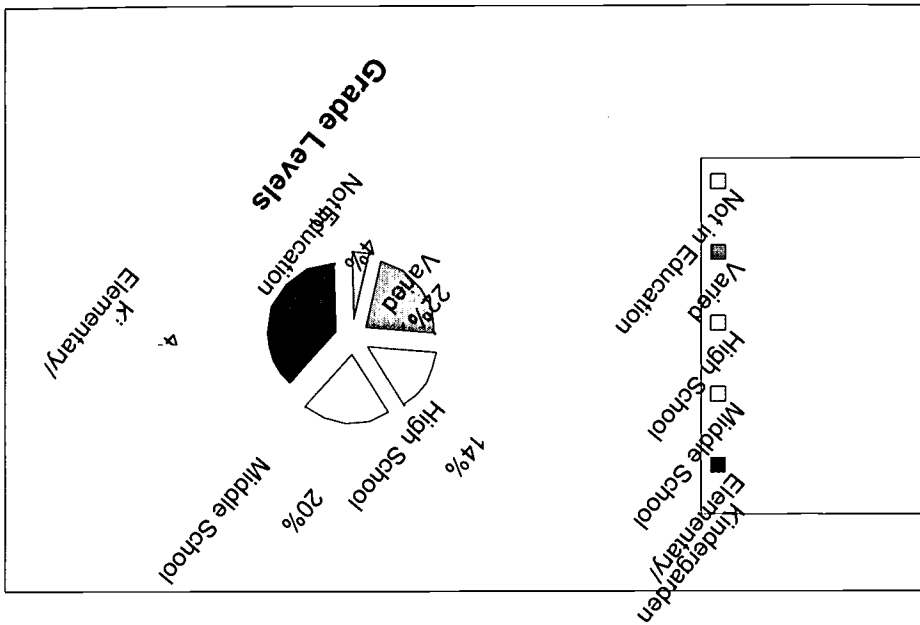
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	There are 10 Groups. 8 in CO group, 11 in CA group	CO-CA		1	Describe	1	Describe	3	Describe	4	Describe	5	Describe	6	Describe	7	Describe
2	Name of the project		Bobca		Bildim		Boanitia life		Yocaris		Perca		Burnay Curab		Haray/Mark		Haray/Mark
3	Name of the students in the group		Paray/Mark		Haray/Mark		Haray/Mark		Haray/Mark		Haray/Mark		Haray/Mark		Haray/Mark		Haray/Mark
4	Number of the groups in each category: CO and CA. 8 in CO, 5 in CA and 6 in 3rd CA		1		2		3		4		5		6		7		8
5	Number of students in each group		1		2		3		4		5		6		7		8
6	10 Techniques listed below for each camera	CO-Computer/Zoom															
7	1. Close up - Zoom in/out			1	Zoom in		1	Zoom in		1	Zoom in		1	Zoom in		1	Zoom in
8	Integrate zoom function with rotation and dolly			0			1	Zoom out		0			1	Zoom in		0	
9	Integrate zoom function with fade in and out and opening/closing over other footage			1	fade in		0	fade out		1	fade out		0	fade in		1	fade in
10	Learn how to change the track to fit into the screen with tracks			1	rotation		1	rotation		1	rotation		1	rotation		1	rotation
11	1. Sloby Camera- Rotate On Screen- Orientation			1	Body eye		1	Rotation		1	Rotation		1	Rotation		1	Rotation
12	How visible is types of rotation them does the CA. Use Cluttering or motion to move the image left to right. Integrate rotation with dolly zoom distortion and various points			1	with dolly		1	Rotation		1	Rotation		1	Rotation		1	Rotation
13	Turn the slide as "objective camera." Creates a mood that the scene is intense because the object has changed orientation, such as the boy of a boat on turbulent seas. There is less empathy and the student does not "identify" with the new orientation, that is, does not feel the blood rush to the head, etc.			1	with dolly		1	Rotation		1	Rotation		1	Rotation		1	Rotation
14	Integrate with other techniques- keyhole/ ripple effect			0			1	Rotation		1	Rotation		1	Rotation		1	Rotation
15	3. Cut/jump cut			1	Cut/jump		1	Rotation		1	Rotation		1	Rotation		1	Rotation
16	Edit a series of "still frames" in sequence to create mood or show passage of time.			1	with dolly		0	Rotation		1	Rotation		1	Rotation		1	Rotation
17	Use text for emphasis also			1	with dolly		0	Rotation		1	Rotation		1	Rotation		1	Rotation
18	Concentrate on pulling shots in order, in sequence			1	with dolly		1	Rotation		1	Rotation		1	Rotation		1	Rotation
19	4. Transitions			1	with dolly		1	Rotation		1	Rotation		1	Rotation		1	Rotation
20	Switch pan/Soft wipe with integration of other effects			1	with dolly		1	Rotation		1	Rotation		1	Rotation		1	Rotation
21	Match by facial features or by face in/out			1	with dolly		1	Rotation		1	Rotation		1	Rotation		1	Rotation

PARTICIPANTS

Among three different locations, 49 students participated the study. On camera groups, which were located in Massachusetts, totaled 29 students; 11 in group one, 18 in the other group. The third was a computer group is located in Madison, WI and there were 20 student in that group. Although the criterion for participation is a self-identification as an educator, only two students who participated the research were not working directly in the classroom.

Chart: Grade Level

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As the following charts show, participants varied in terms of the years of teaching experience.

Chart 2: Teaching Experience

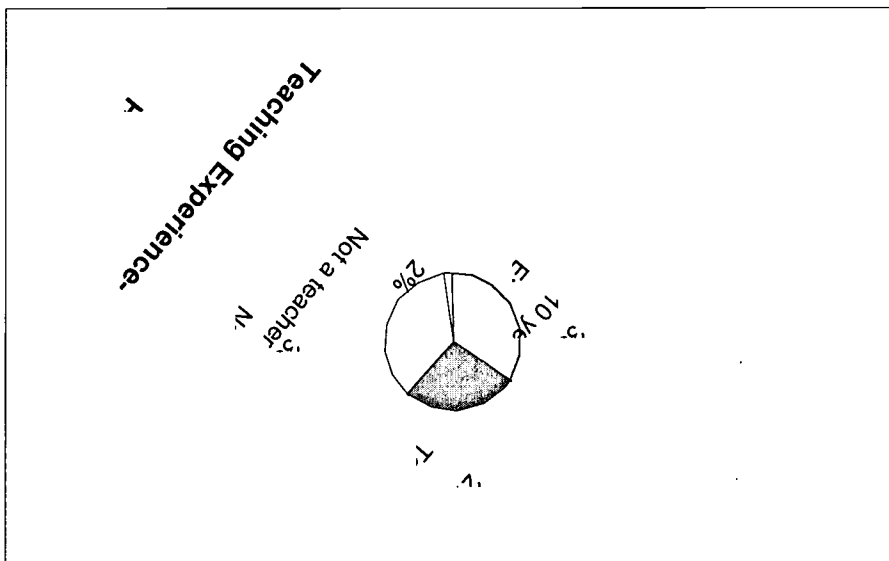
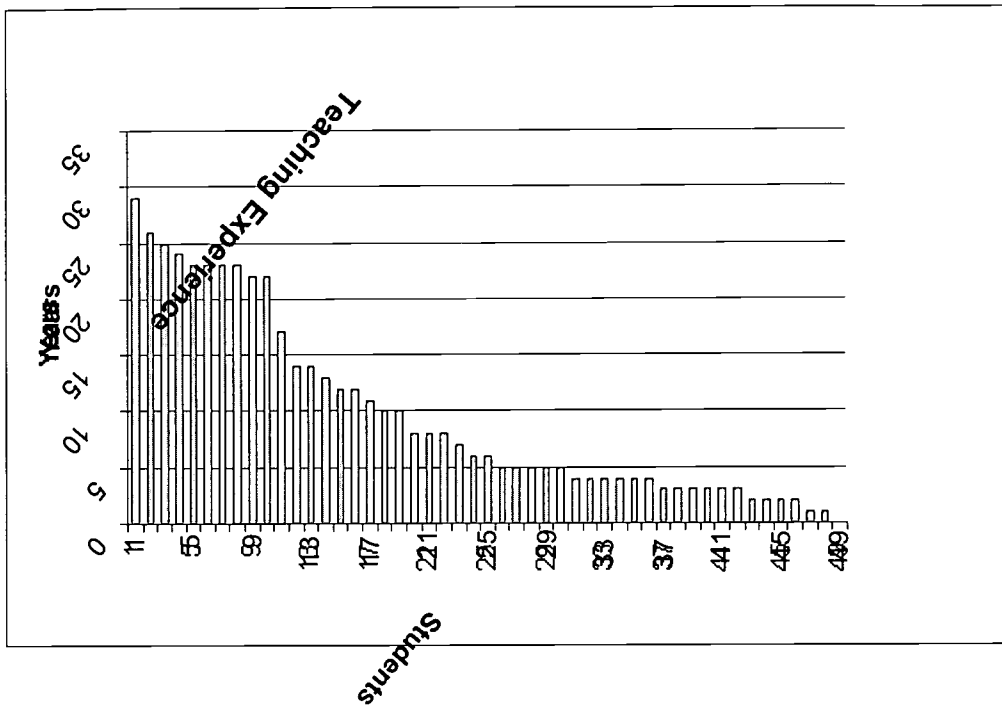


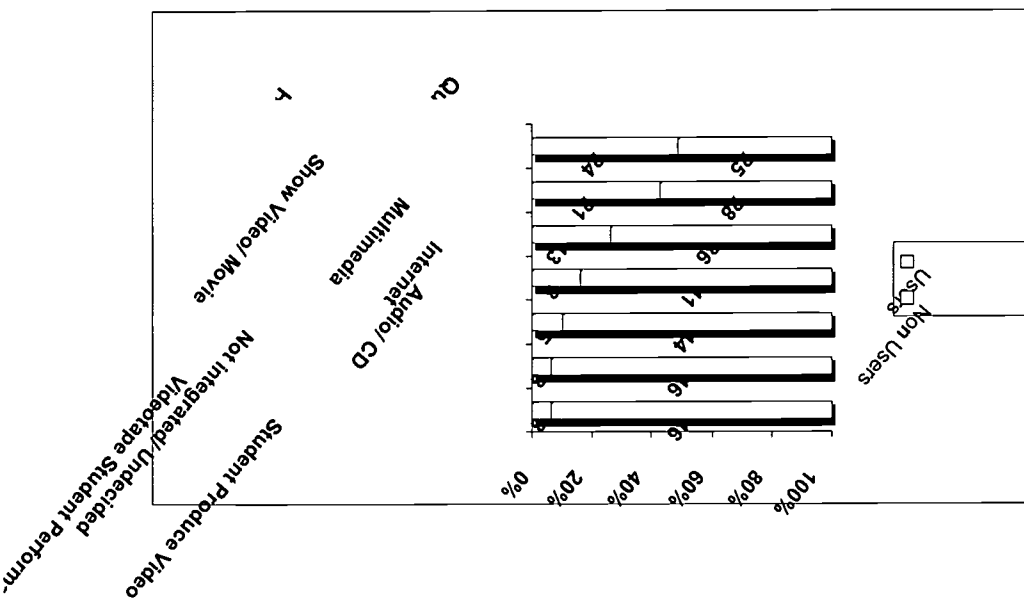
Chart 3: Teaching Experience among participants over years.

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On top of print media, magazines, newspapers, the chart below shows the participants' responses to the question "How do you integrate media into the curriculum?" 50 percent of the participants show videos, movies, or news clips related with their topic.

Chart 4: Participants answer to Question 2, "How do you integrate media in your curriculum?"



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Teachers in the group used video mainly for showing movies and videos related with the course content and presenting PowerPoint presentations and Internet. Twenty-four of the participants used video to show videos or movies related with the subject area. There are only three participants (two of them are technology teachers) who integrate video production in small portion of the curriculum. As one says “so my students learn to use video cameras and non-linear editing. I also use linear editing machines, but probably not for long. My students study TV commercials, then make one of their own.”

46 out of 49 students are responded to the media survey. According to the students media survey results, 25 out of 46 participants expect to learn how to integrate video production into the curriculum. 24 out of 46 participants are taking this course to learn the technical aspects of video production, how to digitize a movie and edit on the computer.

Among 49 participants there were only 3 students who had a background in video/ film production. These three were also media/ technology specialist in their school. The rest of the groups had never used video cameras besides home movies or video taping student performances.

RESEARCH SETTING

The research took place during the course called “Video as Educational Technology” course in three different locations. This course has been taught in different locations in the United States. The study was conducted in Hingham and Sharon Massachusetts, in Madison, Wisconsin. Lesley University offers Master of Education Technology in Education Program on campus, regional off campus, or national off campus. Massachusetts groups were considered regional off campus whereas Wisconsin group was national off campus program. Participants were living in nearby towns but the instructors travel to the various sites nationwide.

Each site was contracted from the local schools. The first site was an elementary school; the other two sites were high schools. Every setting had access to extra classrooms, library, or a work area in

addition to the computer lab. Participants in camera group also used various settings for their videos. Example, coffee shop, pet store, playground, farm, restaurant.

The students in computer groups primarily used the computer lab. The computer lab was equipped with computers with digital editing software called Adobe Premiere, digitizing station for analog to digital, VCR, and a few digital and 8 mm camcorders.

For camera groups, there were four 1/2 inch VHS camcorders and 4 tripods and one 8 mm video camera provided, and some students brought their camcorders for video production exercises to the class.

While all the first camera group participants stayed in the school for their video production exercises, most of the second camera group decided to shoot outside of the classroom due to the two different weather conditions.

Table 2: Three sites used for the research and their specifications.

Specifications	Camera Group 1	Camera Group 2	Computer Group
Location	Hingham, MA	Sharon, MA	Verona, WI
School Setting	Elementary School	High School	High School
Computer Lab	25 Macintosh computers With data projector	22 Macintosh computers With data projector	22 PC computers With data projector
Meeting/ Work Area	Library with TV/VCR Additional Classrooms	Classroom with TV/VCR	Library with TV/VCR
Equipment for the Magic Exercise	Provided: four 1/2 inch VHS camcorders with 4 tripods. Students brought: One digital camera, one 1/2 inch VHS camcorder and one 8mm camera.	Provided: four 1/2 inch VHS camcorders with 4 tripods. Students brought: Two 8mm camera.	Provided: 20 PC computers with 128 MB RAM with internet access, and network capabilities. Students brought: one 8mm camera, and one 1/2

			inch camera.
Locations used for video exercise	Library, additional classrooms, hallways, computer lab, school playground.	Coffee shop, pet store, kitchen, one fast food restaurant, school track area, school office area, parking lot.	Computer lab
Timeline	April 6-8 May 11-13	June 15-17 July 13-15	June 1-3 June 29, 30- July 1

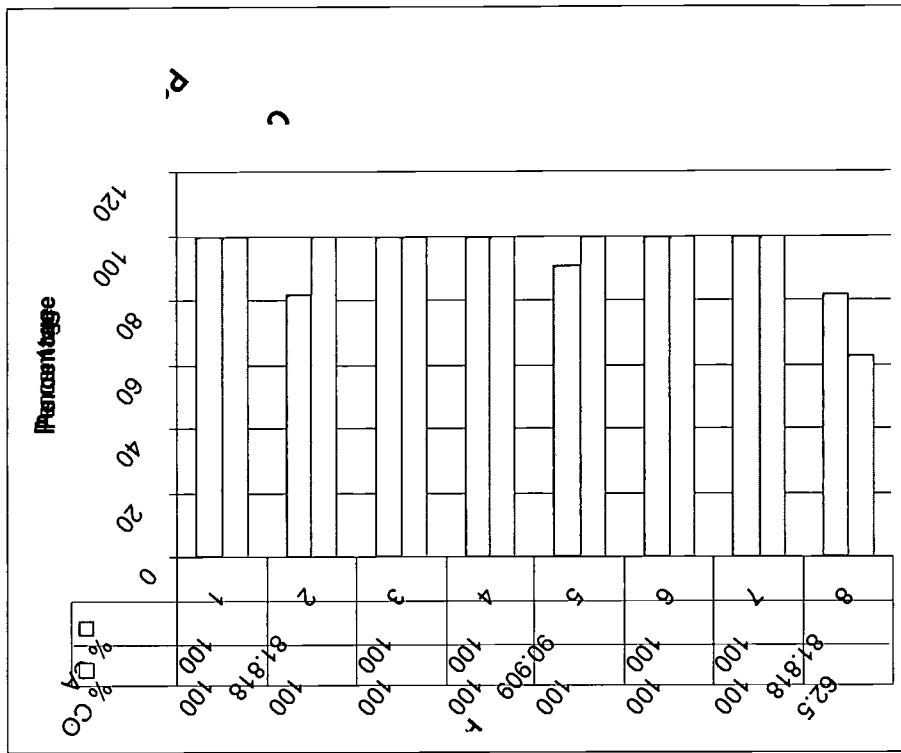
ANALYSIS OF MAGIC EXERCISES

The bar charts below are based on participants' video production activities. The first chart is based on 8 techniques. It was just showing which group integrated these techniques during the magic exercise. Based on the following chart, Camera Groups (CA) completed all of the hypotheses more than 80 percent. Computer groups (CO) completed 7 out of 8 hypothesis more than 100 percent, only the animation technique is 62.5 percent.

Each computer and camera group completes technique 1, 3, 4, 6, and 7. In addition to technique 1, 3, 4, 6, and 7, CO group also integrated 2, and 5 for 100 percent and CA group integrated technique 2, 5, and 8 over 80 percent.

Chart 5: Percentages of Hypothesis accomplished by Camera and Computer Groups

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On the table below, characteristics of CA and CO groups were outlined.

Table 3: Characteristics of *Nonlinear vs. Linear Video Editing*

	On Camera Editing Analog	Non-linear Editing Digital
Capabilities of the medium	Cannot do everything Bug-free	Overwhelming, too much gadgets Programs get corrupted, bugs can be generated.
Learning Curve	It is intuitive	Takes so much time to learn
Learner	Focus on the process Spend more time on learning the subject	Focus on the product Spend more time on learning the software
Requires	Camcorders, videotapes for videotaping. TV monitor for viewing videos. Requires art materials, scissors, paper, Vaseline, etc.	Digital cameras, scanners, video card, computer, digital editing software, and RAM. Requires rendering of effects, transitions (diminished on more powerful and expensive real-time systems).
Main Idea/ Theme/ Order of the project	Stays almost the same	Changes frequently
Storyboard	It requires a good storyboard that outlines every detail.	It does not require as much pre-post-production logging and planning.
Storage	Requires videotape.	Requires large storage space to save and bandwidth to transmit.

	Videotapes hold two or more hours of footage.	Long videos require LARGE hard drives (fortunately, the cost of hard drive space has plummeted lately).
Editing	<p>Challenging- forgetting to insert one shot requires to do the editing from the beginning.</p> <p>Changes are impossible, requires redo.</p> <p>Some shots can be lost because camcorder may roll back a few seconds during the animation or the cameraperson may not provide enough intervals between each shot and the camera may record over the previous shot.</p>	<p>Very easy, any shot can be inserted in any time.</p> <p>Changes are easy to make.</p> <p>Every shot can be stored separate and can be used whenever needed.</p>
Process of editing	<p>Linear</p> <p>Editing continues throughout the process.</p> <p>Traditional video editing, using tapes, is linear- you do edit one after another in order.</p> <p>Does not require an extra step. Once the video is ready, it is a final product.</p> <p>No need to find segments. Create segments while shooting in order.</p>	<p>Non-linear</p> <p>If the computer is down, editing stops.</p> <p>Digital editing on computer can be non-linear: you can do your edits in any order and rearrange them. It means that students can revise their work easily, as they would with word-processing.</p> <p>Requires the digitizing or capturing step (even with the DV format, material still has to be transferred into the hard drive).</p> <p>Finding segments is very easy.</p>
End Product	<p>No generation loss since everything will be done on camera.</p> <p>Analog videos loose their quality when copied into a new videotape. Generation loss occurs when a videotaped copied out of a copy.</p> <p>Videotape can be digitized into computer.</p> <p>Size of the videos will be longer than computer groups.</p>	<p>Essentially no generation loss (beyond the initial compression process in digitizing).</p> <p>Digital videos can be reproduced without a generation loss.</p> <p>Digital video file can be transferred into a videotape.</p> <p>Size of the videos will be short.</p>
Quality of editing	Fuzzy shots, static, and long duration of shots occur.	Pixcellation of pictures, jumpy pictures due to compression occur.
Specification	Imagination is your limit for creating videos.	Allows endless experimentation with visual/audio elements arrangement, effects, transitions, etc.

Depending on the nature of the video magic or the capability of the medium, the groups integrated various techniques. In computer groups, popular techniques are superimposing over a picture or adding fade in and out function which is a matter creating points and changing the red lines in various directions.

It was predicted that computer group prefers “zoom in” function instead of “zoom out” more often because while zooming out image gets farther away, and shows white background. CO group learned how to zoom out or distort the image to fit into the screen. In order to fit into the screen, CO group either zoomed out of the picture or distorted the image to fit into the screen. Because of the rectangle shape of the video shot, while rotating the image or video clip, there may be white corners unless the group changes points on the distort image window area or increase the percentages of the zoom function under the motion setting window to eliminate this problem. Sometimes the quality of the image decreases when the image is distorted. On the other hand, camera groups can use both zoom in and out without any constraints of the image having white corners. While using the camera, the participants may detect the difference between the zoom in and out using the camera lens with dolly in out using the tripod or the movement of the body.

Among 8 CO groups, 6 of them used zoom in (increase the percentages) or distort the image to fit into the screen. In order to fit into the screen, they changed points on the distort image window area or increased the percentages of the zoom function under the motion setting window. 3 out of 11 camera groups seemed to detect the difference between zoom and dolly in their video production project. Until after they looked at each other’s video clips, participants used the camera lens just to practice what was asked from them in the exercise. While viewing, they wished they had more time to go back and redo some of the mistakes they had in their video. Some clearly indicated that they could have done better, if they had a chance to practice with the camera.

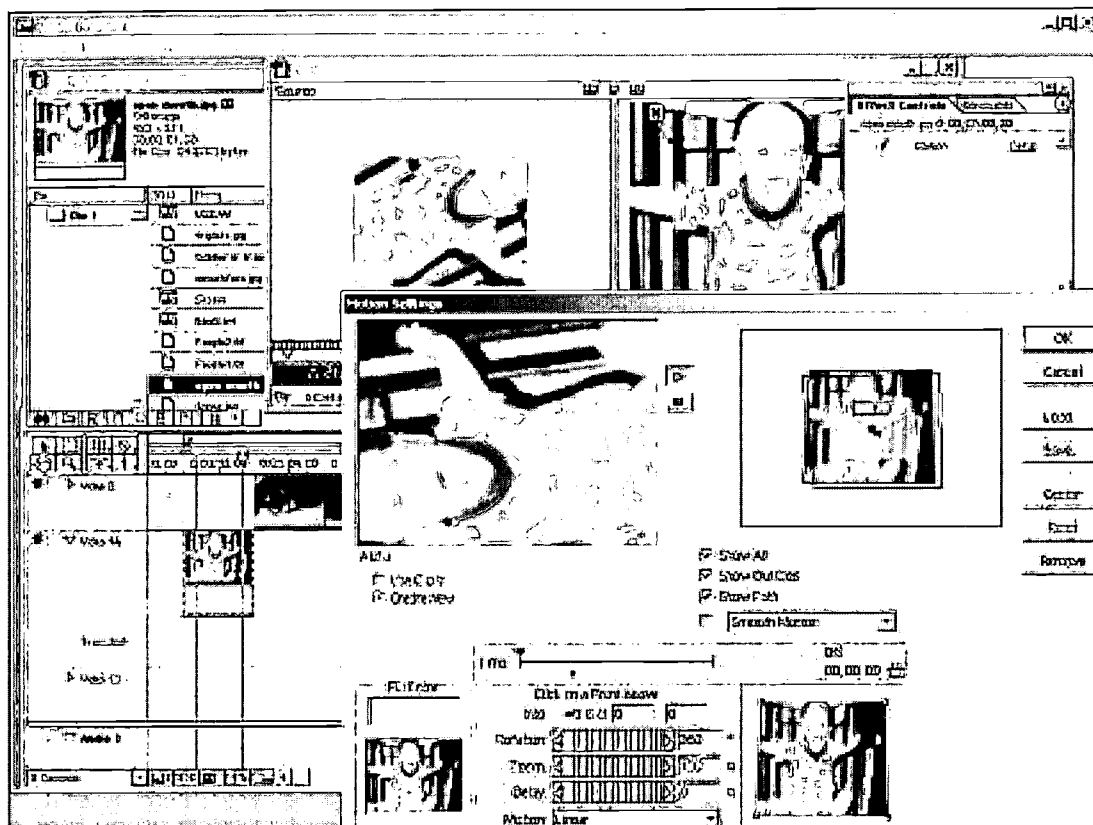
As seen on the chart 5, Computer groups created “Shaky Camera- Rotate the Scene- Orientation technique” 100 percent and Camera Groups nearly 82 percent. Only two groups in CA group did not integrate this technique. As expected it was very hard to rotate the heavy camcorders. Only 4 out 11

groups had lightweight easy to use camcorders, others used four heavy weight 1/2 inch VHS camcorders for their video projects.

On the digital editing software, participants randomly selected degrees for their rotation technique, tested the clip and edited the degrees easily if necessary. The rotation points and degrees were selected by specifying the end point (orientation from upright) and the speed of rotation and then the speed of the clip was automatically controlled by setting numbers. The Computer groups generated far more variation in types of rotation than did the Camera group. 5 out of 11 groups integrated the rotation technique into their project. Among these five groups, only three groups rotation technique created a video magic. One group integrated the rotation and shaky camera effect in their earthquake effect. The other group rotated the camera 360 degree when one group member was reading a story through the playground equipment. And the third group rotated the camera 180 degree (upside down) and threw two balls on the floor, created an effect as if the balls were on the ceiling. The other three were just rotating the camera for 45 degree or just putting the camera upside to get a still shot of a dog.

Participants in CO groups treated the rotation and shake as "objective camera." As if the scene was rotated because the object changed orientation. For instance, one of the CO groups rotated an image of a baby for 360 degree with 35 % delay. After the text "I want to be a skier" and we see the skier video. In this case, the group chose to rotate the image to give a sense of excitement to the sequence.

Screen Capture from one of CO groups video magic project (Adobe premiere software v 5.1).



As in the following example, the CO group rotated the image 365-degree superimposing over the hand picture. Student in the group said, “We did the overlap of the burning candle and writing notes to show simultaneous feelings.” They tried to show the time passing by while teachers are working hard. The added “We tried to get the metaphor of the candle transitioned to the actuality of the teacher working so the viewer would not miss the message.”

Computer groups used the rotation and tried to rotate 360 degree versus Camera group had a hard time rotating the camera physically. Camera groups treated the camera shake and rotation as “subjective camera.” Among 11 camera groups, 5 tried to integrate the shaky camera effect into their project. A mindset that the scene was rotated because the viewer changed the tilt of his/her hand, i.e. laying down on a bed. Participant felt the weight of the camera as "off vertical" The participant tilted his/her head to make the shot. Thus the student who used the camera in some manner "empathized" with the subject being

filmed. The effects were created by physical methods such as shaking the camera. Therefore the effects were assimilated into the purpose. The video of the feet showed "shaking" as someone was walking on a narrow wall-top. The shaking was "motivated" in the sense that one might have the sense of being out of balance if one were walking on a narrow wall-top.

Participants in CA group focused more on the storyline. They also used their storyboard more carefully. After the video production experience, some students emphasized the importance of detailed storyboarding. 8 out of 11 CA groups stayed close to their storyboard that they originally wrote whereas CO groups storyboarded as they work on their project. Successful projects in each group are the ones who had a theme or topic for their project. They were more creative when the group had a common idea or theme. For instance, one of the CA groups chose "feet" as their topic. They integrated most of the techniques into various shots of different feet.

As expected, both groups integrated transitions into their project. Although it is harder to create transitions on the computer, camera groups integrated more transitions more than computer groups.

Each group integrated at least one of the three sound options; voice over to tell the story; music from a CD; and sound effects. Voice over was a popular choice for camera groups, and music clips for the computer groups. On the other hand, CA groups integrated voice over, sound effect, or music selectively. Participants in CO groups inserted and edited sounds and deleted audio tracks on the *timeline* easily using the digital editing software. Although CA groups could not easily go back and edit their sound tracks, they still reasonably integrated audio into their project. Camera groups told their stories while filming their shots.

Camera groups integrated animation into their video project more than the computer groups. Although the camera groups who worked on animation found the animation technique the hardest, they all enjoyed creating an animation, especially watching each other's animation. A few Camera groups

experienced frustration when they spend a lot of time on their animation and ended up losing their animation because they did not give enough intervals between shots, and the last shot erased the previous shot.

Among 8 computer groups, 3 groups did not work on animation at all. These three groups worked on motion and rotation function to move objects side to side and up and down. Animation was considered a picture moving across the screen, but the background moved with the object when they used the motion and rotation function. Apparently, it was difficult to understand animation. Some of the participants said they could have created animations if they had a camera. Almost all of the participants said they did not think of a text animation when they were to work on animation technique. For them, animation means moving unanimated objects to move.

Computer groups created animations that focused on fixing the frames, ordering and editing the shots on the timeline. Although it is easier to edit, time, and sequence the shots on computers, animation technique was more popular among camera groups. Participants who worked on animation felt more accomplished their video magic exercise than the students who could not work on the animation technique. 9 out of 11 camera groups focused on the importance of shooting the right shots in sequence. A few groups need to redo their animation when they realized some of their shots are either too long or too short for an animation. The other most important thing CA groups found out the need for keeping the camera steady while creating the animation.

Among 5 computer groups who worked on animation, 1 animated the credits, 2 animated the *gif* files from Internet, and 2 rotated graphic images. One of the rotated image is generated on the software and the other one is an imported clip art picture.

RESPONSES TO MEDIA PRODUCTION ACTIVITIES

This study describes how adult participants used video production and video editing as a medium of expression during the production process and developed a new understanding of media from a producer point of view. In each group, participants used either camcorders or computers, which force them to be media producers instead of consumers during the media production activities.

Table 4: Participants’ reflections and responses to magic exercise.

	On Camera Editing	On Computer Editing
Ideas for integrating into the curriculum	<p>“The media activities in the first weekend gave me some new ideas for teaching. I had never considered using video to teach point of view or perspective. I will be trying this in the Fall.”</p> <p>“I want to use the video camera more often. It is motivating for the students and I can add it into my speech therapy techniques.”</p> <p>“I hope to have students use a video camera/news clips/still shots to edit on Adobe Premier real-world applications of mathematics. I think it would be a great activity for those students who loathe math.”</p>	<p>“I am going to use the commercial exercise that we did the first weekend before we came to class. This will be very helpful in which my students have to determine a way in which to advertise and market their product”</p> <p>“I am more energized to get back to media literacy. I have not done much for the last 3 years. I had classes very difficult to trust out of sight and making videos means kids have to have some autonomy. But I will have a great group next year and I can use all this stuff to get back on the ball.”</p>
Color/ light	<p>“In general lighting is very important in mood and theme. I can’t help but think of “Crouching Tiger, Hidden Dragon” and the use of color: for instance, the first martial arts fight in the streets of the ancient Chinese city was all in gray tones, lending seriousness to the scene; the martial arts scene in the bamboo trees was done with a very gentle blur against a backdrop of the green trees giving the whole scene an ethereal quality.”</p>	<p>Students mentioned that they focused on the activity not the mood or the effect on the audience.</p> <p>“In general, I think the different types of lighting help determine whether something has a more realistic feel or a more lighthearted feel. It helps determine whether the production has a warm or cold, comedic or dramatic. It sets the whole tone.”</p> <p>“This activity was done before we had any class discussions of lighting as an issue... consequently, we did not pay attention to this factor at all. We did not even think about trying to convey mood with lighting or anything else. We were focused on the activity only.”</p>
Effect on response to media	<p>The magic exercise put the students behind camera.</p> <p>“Media activities have made me less of a passive viewer and more of an active viewer of media.”</p> <p>“The effect that the magic exercise has only TV viewing is that I am more observant as to which techniques are being used and analyzing why its</p>	<p>“The activities made me feel like I could be more of a producer, not just a viewer. I feel more confident that I can make simple versions of the things I see on TV.”</p>

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	<p>being produced in that particular way.”</p> <p>“Don’t believe what you see on television. All these statements are untrue, after recently producing a commercial, I believe anything is visually possible with the help of fancy equipment.”</p>	
<p>Key concept in media education</p> <p>Video Production</p>	<p>For CA media production is a key to learn media literacy.</p> <p>“The technical aspect of media education is the key concept. If you don’t know what hooks up to what or how to work a piece of equipment, the media education experience will not be successful.”</p> <p>“Media Education should include learning about the process of creating media as well as understanding how to utilize media effectively.”</p> <p>“Media education should teacher students how to use the equipment, trouble shoot problems and the scientific principles behind the technology. Learning how to use the equipment should be the primary goal.”</p> <p>“I define the goals of media education as knowing how to integrate media technology into a classroom of your students. I think the key concepts in media education are teaching the learners to use the media equipment and then to show them how to edit their pieces of work.”</p>	<p>For CO, media production is very frustrating, time consuming.</p> <p>“I was very excited to learn Premier, but now I am disappointed and frustrated and need to back off. It is too expensive to set up, too time consuming to use as a busy teacher.”</p> <p>“Premiere is not very user friendly. It is difficult to understand the different terminology used, it doesn’t always work the same way twice. Having software and hardware that are out-of-date for the computer lab that we are working with takes away from the learning atmosphere and adds quite a bit to the frustration level.”</p>
<p>Time Management/ Allocation for the video magic activity</p>	<p>“I did not feel that we have enough time to film and at the same time internalize/understand the process. I feel that all this was too new and I was so inexperienced that it took additional time just to get up to speed. I would do the same project much differently this weekend now that I have a better understanding from which to work.”</p>	<p>Time is an issue but it is perceived as an ongoing issue with technical difficulties.</p> <p>“More time to practice using the program.”</p>
<p>Cooperative Learning</p>	<p>Group Work is highly appreciated. They enjoyed exploring and learning from each other</p>	<p>They found the group work challenging. More than two person in the group generated problems.</p> <p>“.. working in my group was challenging because we all had different ideas, and we were perfectionists. Therefore, we ran out of time to incorporate all of our ideas, and to get it to look exactly the way we had hoped.”</p>
<p>Discovery Learning vs. Trial and error</p>	<p>Discovery occurred while trying the various buttons on the camera. Animation is a great example.</p>	<p>Drill and practice- teacher presents how to and students practice.</p> <p>“I think that it was fun creating the magic exercise. It was frustrating at times because we had no tutorial to guide us through the process.”</p>

		But it wasn't too bad because you gave us a lot of time to experiment with the Adobe Premiere Software. Learning through <i>trial and error</i> isn't so bad as long as you are given plenty of time."
Discussion	Created dynamic and productive discussions among the groups.	Generated discussions among the group but they frustrated each others editing style.
Suggestion for improvement	All of the students reflections started with I had so much fun or I enjoyed the video production activities. "I found the magic exercise a great learning experience as well as a lot of fun. The only suggestion that I would make would be to make sure that you give your students a little time to come up with an idea the previous day in order to allow them to bring in any props that they might find necessary... After all the work that was put into them, it was very satisfying to see the final product."	Almost all of the CO participants suggested more detailed instruction and tutorials. In addition to the difficulties of the software students expressed a great need for more hand on step-by-step instruction. "I did discover how to plan to create what it is you want people to see and interpret from your video, but it was sometimes difficult to figure out how to do that on the software!"
Each medium provides different dimension in media literacy. (Potter, 1998)	CA group experienced cognitive, emotional, as well as aesthetic dimensions of the project.	CO group focused mostly on aesthetic dimension of the project.
Students' Level of Technical Proficiency	It did not required technical skills, students who considered novices also excelled. Especially, the ones who considered themselves novice produced very well organized and interesting projects at the end.	Students who had previous technology skills considered themselves intermediate or expert did better on their production. Although they are the most frustrated because they came to this class hoping to learn more technical information than media literacy.
Focus	Focused more on the story "We did not use any lighting differences due to being an initial novice about the production techniques. We concentrated more on the what to do off camera then with the camera itself. "	Focus was on the production, learning the technical skills. "We wanted to experiment with the different tools. I don't recall being able to put much time into thinking about the message we wanted to convey." "I forget the camera angles we used. I remember simply experimenting with adobe premiere. So, we chose camera movements based on experimentation."
Storyboarding / Concept Mapping	Storyboards were more elaborate and detailed. Original stories stayed close to the end product. "Planning is important."	CO participants did not want to spend time on storyboarding. They feel like they needed to spend time more time on learning the software. Most ideas their ideas generated during the experimentation of the software. Initial theme or ideas changed when experimenting the software. They created the techniques based on experimentation not for a specific reason.

CONCLUSION

Media production projects are important in enriching our curriculum. A media production project generates interest to the topic being studied and includes research, writing a script, storyboarding, and involves group discussions. Students' media projects not only develop problem solving and interactive collaboration skills among students but also enhance learning providing project-based, experiential and hand-on approaches to the theory and its applications in the classroom,

'The camera never lies', 'seeing is believing,' and 'what you see is what you get' are accepted expressions. However, what we see on TV, or hear on the radio are constructions and they reflect the producers', authors', and camerapersons', journalists' point of view. By actively involving students in producing media such as PSA (public service announcement), web pages, or radio shows, etc, they come to understand the conventions of the medium. As students become the producers of their own media projects, they develop media literacy skills, and become informed consumers and citizen of the world.

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