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Lights, Camera...Leadership! (LCL) Evaluation Report

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Executive Summary

Some assumptions guiding those using the Lights, Camera... Leadership (LCL) curriculum include: That an evolving information technology has a role to play in educating all students, particularly those who are non-traditional learners and leaders; Schools possess a civic mission to provide their students with opportunities to be contributing citizens of their communities; Students can be trusted to make important decisions regarding what they learn and how they choose to express that learning; and Teachers collaborating with each other and with their students can yield effective learning outcomes.

The central feature of the LCL curriculum is a student-led production of a video documentary on the subject matter of their choosing. Students are encouraged to develop their leadership capacity, engage in team work, make decisions collaboratively and consider topics that are of some importance to themselves and their communities. Over the course of the LCL project these students are asked to research the subject from past, present and future perspectives, shoot footage, interview informants, edit and produce a polished video documentary, and premiere it within their communities, facilitating dialogue about the topic. Participating teachers are encouraged to integrate this project into new or existing curriculum.

During the 2006-2007 school year, eight Vermont public (and one private) middle and high schools offered some version of the LCL curriculum. Most participating teachers were enrolled in a graduate course taught by Helen Beattie and Jay Hoffman. Drawing upon a seven phase curriculum developed by Beattie, these teachers facilitated the development of eight different documentaries on subjects ranging from the costs of war to the realities of organic farming, to perceptions of cafeteria workers. In all, over 100 students and 16 teachers were involved in these projects.

A summary of results of this evaluation suggest that student participants deepened their level of mastery of video and computer technologies associated with these projects and in the process reported growth in their capacities to persevere through difficult challenges, work together as a team, develop communication and civic skills, and learn a great deal about their video topics. It would appear from these findings that the utilization of video technology within the context of project-based learning supported students' capacity to learn. These findings suggest that curriculum of this nature provides an excellent opportunity to support heterogeneous learning environments through which differentiated instruction can take place. In addition, teachers were able to speak to the contribution that their participation in the LCL projects contributed to their development as educators who are able to work collaboratively with students to achieve common goals. Lastly, community perceptions of students as community leaders were either positively affirmed or positively advanced through their attendance at the video premieres and subsequent interactions with the student participants.

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I. Introduction to Evaluation Goals and Methods

In this age of “researched-based teaching practice,” it becomes ever more apparent for the need to rigorously describe and assess curriculum. The Lights, Camera, Leadership Curriculum was evaluated by Christopher Koliba, Ph.D., from the University of Vermont. The study was informed by six guiding evaluation questions illustrated in Table 1. below.

Table 1. Lights, Camera... Leadership! Evaluation Questions

THEME	QUESTIONS
Description of activities	How did each site utilize the LCL curriculum? What modifications were made and why? What happened at each site?
Lessons learned about the curriculum	What challenges/ opportunities existed in implementing the curriculum?
Perceived impacts of the experience on student learning	What were the impacts of the Lights, Camera, Leadership (LCL) curriculum on <i>student participant learning and development, specifically in terms of asset development, civic learning, mastery of technology, the vital results and appropriate field(s) of knowledge?</i>
Perceived impacts of the experience on youth/adult collaboration	What were the impacts of the experience on <i>youth/adult collaboration and partnerships?</i>
Perceived impacts of the experience on teacher practice	What were the impacts of the experience on <i>teacher practice?</i>
Perceived impacts of the experience on the school & community	What were the impacts of LCL projects on the <i>community and school?</i>

Both quantitative and qualitative methods were employed, including the application of pre and post experience surveys to the participating students. This instrument was designed to measure their perceptions of asset development, civic learning and mastery of technology. These measures were used to attempt to develop a picture of the relationship between student attitudinal and skill development, and the LCL curriculum. Normed survey questions were drawn from civic learning studies sponsored by CIRCLE at the University of Maryland and the Youth Assets Project organized by the Search Institute. Attitudinal measures included: self esteem; sense of future; concern for others; personal responsibility; team work; conflict resolution; leadership; care for community; appreciation of diversity; communication skills; relationships to adults; and perspective taking. Students’ mastery of technology was also measured through the pre and post survey means comparisons. Questions from the pre-survey were compared with identical questions asked in the post-survey using a paired-sample t-test, allowing comparisons of the means between the pre and post questions. A t-statistic and a P-value were calculated using 90% confidence level for each pair that indicated whether the mean differences were significant. The sample size for the student survey was n=72, with some schools completing all pre and post surveys and others only the post surveys.

Community perceptions of the video project and their perceptions of the capacity of youth as contributing citizens was measured through a survey delivered at the end of each public premiere of the student videos.

The qualitative portion of the study encompassed interviews with LCL teachers and focus groups with participating students. These interviews and focus groups were transcribed and coded for common themes. Throughout this report, quotes ascribed to teachers, students or community members are represented in italics.

The challenges inherent to the assessment of any curriculum are evident here. The LCL curriculum was implemented in very different contexts, tied to very different subjects, and involved students from different grades (from 7th to 12th grades). An opportunity to appoint a control group did not conveniently exist. Although the mean comparison results from the pre-post student survey ended up being inconclusive, the many environmental factors that students encountered during the life of the LCL project outside of the context of the LCL projects makes it extremely difficult to render any general conclusions regarding the impact the curriculum on student development and learning. Qualitative data drawn from student and teacher interviews may be triangulated with this data to render a deeper picture of the informants' perceptions of the impacts of the LCL curriculum on student learning. This triangulation may be used as a means for compensating for this complexity.

II. Adaptation of LCL Curriculum

The Lights, Camera, Leadership (LCL) curriculum was designed by Helen Beattie and is comprised of seven phases:

- Phase 1. Orientation & Teambuilding
- Phase 2. Defining the Topic & Becoming Experts
- Phase 3. Video Pre-Production Process & Technology Training
- Phase 4. Video Production: Filming Interviews & B-Roll
- Phase 5. Video Editing
- Phase 6. Preparing and Hosting the Premiere.
- Phase 7. Reflections and Celebration

The participating teachers were provided training on these phases and the exercises attending to them. Table 2. provides an overview of the ways in which the participating schools adapted the curriculum.

Table 2. Adaptation of the Curriculum by Participating School

	Cabot	Charleston	Essex	Missisquoi	Riverside	Rock Point	South Burlington	Twinfield
Teachers' Back-ground	Social Studies; Information Technology	Social Studies; Technical Education; Guidance	Social Studies; Technical education	Technical education	Social Studies/Science; Language Arts	Science; Art	Technology Education	Social Studies; English; Library
Grade Levels	11 – 12 th Grade	8 th grade	7 th -8 th grades	12 th grade	7 th - 8 th grade	10 th -12 th grades	11 th -12 th grade	9 th – 12 th grades
Ties to the Curriculum	Social Studies: Media Literacy	Social Studies: American History	Teaching Advisory	Music Technology and Video	Social Studies; Language Arts	After school offering	Documentary making	Social Studies: Rights & Action
Number of Students	9	12	26	6	24	9	14	16
Number of LCL Units Used	32	22	23	17	43	Activity log not completed	37	17
% of LCL Curriculum Used	43%	29%	31%	23%	57%	Activity log not completed	49%	23%

The eight participating schools adopted the curriculum in one of four different ways:

- Integrated into an existing curriculum: Charleston (Existing units on the Constitution and American Government); Twinfield (Existing course on “Rights and Action”)
- Overlaid across a curriculum: Cabot (Loosely tied to Media Literacy course); Riverside (Integrated across Science and Language Arts)
- Created as a stand alone curriculum: Rock Point; South Burlington; Missisquoi
- Integrated into a Teaching Advisory structure: Essex

Participating schools had 75 units or exercises that comprised the LCL curriculum available for their use. The creator of the curriculum did not expect the schools to use all or even most of them. The participating schools reported using any where from 23% to 57% of the curriculum.

In looking specifically at the level of adoption of the original LCL curriculum, it becomes apparent that the earlier phases of the curriculum (focused on teaming and goal setting) tended to be more widely adapted. Table 3., below, shows how the exercises and units associated with the earlier phases tended to more widely adapted.

Table 3. Adaptation of Specific Units/Exercise

EXERCISE	% of schools using		
		Decision-Making	
Time Capsule	57%	Genuine Community	14%
Syllabus Review	100%	Fist-of-Five- Taking the Video Pulse	43%
Exploring Video Project	86%	Remember the deep Dive?	57%
Why a Community Video?	0%	Closing Activities: Headlines	0%
Deep Dive Video	100%	Closing Activities: Learning Flight Plan	0%
Up Chuck Problem Solving	29%	Closing Activities: Reflections	14%
Warp Speed Problem Solving	29%	Closing Activities: Goal Setting	14%
Full Value Commitment	100%	Five Key Questions-- Finding the Answers	57%
Compass Points	100%	Experts Review "What Makes a Great Video Doc."	43%
Community is...	57%	Production Team-- "Take One"	43%
Why do People Live in Groups?	29%	Deep Dive & Compass Points Revisited	43%
SMART Goal Setting	29%	Full Value Commitment-- Check In	86%
Comfort Zone & Beyond	86%	What's Great About Me	0%
The Project Simile	0%	The Outline Collage	14%
First Interviewing Ingredient: Listening	86%	Identify the Cast of Characters	43%
Interview Practice	57%	Identify the B-Roll Needs	71%
What to Ask and How to Ask It	57%	Who's Doing What? Production Team Marketplace	43%
Pass It On	43%	Interview Question Development	71%
What I Heard You Say Was...	43%	Go Out and DO IT!!	57%
But...Don't You See?!	14%	Closing Activities: Newspaper Sculpture	0%
The Ticket to Talk	43%	Closing Activities: Human Sculptures	0%
What is a Focus Group Anyway?	29%	Find the Expert	29%
Ten Steps for Organizing a Focus Group	29%	Log Video Footage	71%
Ten Steps to Organizing a Focus Group-- Tips	29%	A Clip at a Time	71%
The Interview Process	71%	Decision-Making Check-In	29%
Historical Process	43%	Video Editing	86%
Findings Marketplace	0%	Closing Activity: Celebration Puzzle	14%
Decision-Making Alternatives	43%	What do you want me to come to?	14%
Tower Building	0%	Snagging your Audience	14%
OUR Decision-Making Choices	29%		
The North, East, South & West of	57%		

Wearing Different Shoes	0%
Conflict Style Inventory	0%
Conflict Escalators & De-escalators	14%
What I heard you Say WasH	0%
Role Plays	14%
"The Worst Presentation Ever" Skits	0%
Public Speaking Tips	29%
Premiere Practice	14%

Stages of Group Development	0%
Reflection Marketplace	14%
Phase Line-Up	0%
Goal Check	0%
Web of Appreciation	0%
Artistic Reflections	0%
Poetry Slam Reflections	0%
Final Celebration	71%

All of the teachers interviewed discussed how they relied very heavily on the initial phases of the curriculum to set the tone, develop a common language, clarify expectations, build teamwork, and identify the group's leadership style. Viewing of the "Deep Dive" Video, creating a Full Value Commitment, and undertaking a Compass Points exercise were completed by all reporting schools.

The most widely referenced unit within both the student and teacher interviews was the Full Value Commitment. One teacher expressed how she and her students used the Full Value Commitment this way, *"We used their commitment to solve their problems. Anytime an issue came up, we revisited the values. (We had to ask one kid to leave because he couldn't follow the values). We talked about what happens if 11 people agree and one disagrees. We talked about the concept of holding on to what you believe and the value of that, and when to compromise."* Clearly, the Full Value Commitment played an important role for the students and teachers efforts to develop a common language, align around common goals, and hold each other accountable.

Teachers reported choosing units and exercises from the latter phases to use as needed. A challenge with the curriculum cited by teachers and students from all of the schools pertained to the time it took for the students to start using the video equipment. Some schools, like South Burlington and Twinfield, had their students make personal videos early on in the process. The students from these schools positively commented on how useful it was to start using the video equipment early.

Other teachers from other schools modified the curriculum as well, creating a milestone chart and flow chart to help guide the process. South Burlington used online, asynchronous journals as a vehicle for students to reflect and communicate with each other during the course of the project.

III. Video Production

In seven of the eight schools both the students and the teachers reported that it was the students who determined the topic of the video. Twinfield shot video footage of their trip to Mississippi before coming up with the focus of the video. In all cases, the students reported making the majority of the decisions pertaining to the video topic, the video narrative, and almost all editorial decisions. When asked what percentage of decisions the students made during the video production phases students across all schools reported making between 85% to 99% of these decisions.

When asked about the teachers' roles during the video production phases, the students and teachers spoke about how the teachers offered guidance and suggestions in places, but did not dictate student actions. It should be noted that was the case for all schools.

For all of the schools except Twinfield the students brainstormed possible topics before shooting video. One student summarized the process used within most schools as, *"We listed topics; narrowed them down; thought about what is important to us; what has an effect on us and our community?"*

Generally these topics related somehow to their experiences or interests. In Twinfield's case, the focus of the video emerged out of the students' experiences in Mississippi.

Table 4. Overview of Video Topics by School

SCHOOL & VIDEO TITLE	VIDEO TOPIC	REASONS THAT STUDENT GIVE FOR SELECTING THIS TOPIC
Cabot "Farmers Have a Say"	The Future of Farming: The video drew on interviews of local farmers discussing trends in farming, including the choices of both traditional and organic options. The business dimensions of farming were explored.	Many of the students from the group had some kind of association with farming; either having worked or lived on a farm. The entire group recognized the importance of farming to their community
Charleston "Looking Through Others Eyes: The True Colors of War"	The Cost of War: The video drew on interviews with war veterans' accounts of war, with the particular focus on war atrocities and the psychological impacts of war. The video featured photo montages of past wars and a taped commentary by one of the state's senators.	The topic of the video emerged from the students' discussions of the Constitution and the War Powers Act. They wanted to know who decides we go to war and how long we remain at war.
Essex "They Aren't Lunch Ladies!"	Perceptions of Cafeteria Workers: The video drew on interviews with fellow students, teachers and cafeteria workers during which assumptions regarding cafeteria workers' identities and treatment by students were discussed.	The students initially wanted to focus on the quality of food offered at the school. As they began to shoot footage the opportunity to focus on the role of the cafeteria workers (commonly referred to as the "lunch ladies") emerged.
Missisquoi	School and Community Responses to Mold Infestation: The video discusses the	The participating students were directly impacted by the mold

“Day to Day in Exile”	implications of mold infestation that resulted in the shutting down of the music and technology rooms for the academic year. The video includes interviews with teachers and administrators and outlines the (slow) process being undertaken to raise funds and ultimately rectify the situation.	infestation. They chose to focus on this topic in hope that it would shift attention onto the issue. They also selected the topic because it was more convenient than other options.
Riverside “Broken Buildings: New Beginnings”	Fixing the Broken Buildings: The video draws upon interviews with town officials and community activists to illustrate the ways in which people are trying to do something about the many abandoned manufacturing buildings populating the town. Footage of the “broken buildings” are interspersed with the interviews.	The students were asked to think about relating a topic to their futures. As they considered whether they would stay in Springfield when they get older, they turned their attention to the issue of the abandoned buildings in town and the efforts being undertaken to renovate or tear them down.
Rock Point Alternative School “Church Street: Teens’ Void or Vision?”	A Teenager’s Place on Church Street: Drawing upon interviews of local police, city officials, business owners and teenagers, the video discusses the history of the local shopping district and the ways in which teenagers use the commons spaces, particularly focusing on how receptive adults are to teens.	The students spend time on Church Street and decided to focus on a topic familiar to them. Most of the students came from outside of the state, and were unfamiliar with other issues impacting the local community.
South Burlington “i learn”	Refugees Experiences in Burlington: This video features interviews with refugees, educators and social service providers. The video discusses issues pertaining to refugee education, services, success stories and contributions that refugees make to the wider community.	The topic emerged out of a brainstorming process undertaken by the students. Rather than focusing on gripping stories from refugee homelands, students chose to instead dispel common myths and stereotypes.
Twinfield “Places of Promise: The Mississippi-Vermont Community Connection”	Schooling, Culture and Religion in Mississippi: Drawing upon footage shot during a trip to Mississippi, this video presents some of the differences and similarities that exist between Vermont and Mississippi. It features stories told by Mississippi community members and focuses on themes relating to social justice and cross-cultural differences.	The focus of the video emerged from the students’ experiences in Mississippi and the video footage that they shot during their trip.

Across all of the schools the students were given some rough guidelines: the topic needed to focus on something that would be of interest to their community; and the topic needed to be “doable”—meaning that they had access to potential experts or informants.

Within all of the schools the students reported wanting to get to video production sooner. The large amounts of time it took to focus on team building and coming up with a topic left little time for shooting video and editing it. Selecting the topic posed a major challenge for most schools. Students spoke of the process as being long and drawn out, with many having to make compromises. One student observed that, *“It was hard to come up with [the topic]. We had to do a lot of compromising. Several people were set*

in their views.” Teachers often helped to guide these deliberations, but not dictate the outcomes.

When asked about the video production both students and teachers spoke about the processes they used to differentiate tasks, with the major roles being: interviewing; camera work; sound; logging video; music; editing; and planning the premiere. In most instances the students gravitated to tasks that they either liked or had the appropriate skills. Some students reported undertaking tasks that were new and challenging to them. Given the nature of the editing process, only a few students per group could undertake the editing. Next to the selection of the topic, the editing process, specifically the nature of making editorial decisions was cited as the biggest challenge.

IV. Community Perceptions of Video and Student Efforts

All of the participating schools were asked to premiere their videos in their communities. All but two schools managed to stage a public premiere that included anywhere between 15 to 125 people. The process of planning the premiere was viewed by the teachers as an opportunity to provide closure for the students.

Surveys were distributing to those attending these premieres. Attendees were asked to rate the quality of the video, ascertain the extent to which the LCL project impacted their perceptions of young people as contributing citizens, and any other feedback that they had regarding the evening.

Table 5. Sample Community Perceptions of Video Premiere

SCHOOL / TOPIC	COMMUNITY FEEDBACK (* = Only Fellow Students Viewed)
Cabot / Organic Farming	<p>All students worked well together. They were in this with all their heart, their love of their town comes through.</p> <p>It felt very smoothly executed and well produced. The subject matter was well organized and thoughtfully done.</p> <p>Important topic in our community and state. Good questions (inferred from responses by farmers). Good choices of farmers interviewed- they all had something rich to say- knowledgeable.</p> <p>Issues were clearly identified. Exploration of farmers interview was extensive and they refrained from editorializing. Production was of very high quality.</p> <p>Students have developed an understanding of a topic of extreme importance to Cabot and our entire country. They covered key ideas and communicated them clearly.</p>
Charleston / Costs of War	<p>I think this a very impressive thing that will remain with the students for the rest of their lives</p> <p>I think this is a wonderful project. The more of this kind of thing, the better. The students appreciation of their projects is extraordinary. They work well together they honor each other and appreciate the importance of what they have learned.</p> <p>A "weighty" topic for this age and especially well done!</p> <p>It's obvious the students put in lots of time and energy in their commitment.</p> <p>I had a sense some of the students will become community leaders. All the students should have said something's and not just only the few. It looked like the work of the project fell only on the few.</p> <p>My son enjoyed working on this movie. He talked about all the hard work involved with pride in his voice. He felt very proud of his accomplishments not only with this movie but the teamwork of his class.</p> <p>This project was an incredible experience for our students, one that, I hope, can be given to others. Each student gained knowledge and as a person because of this opportunity. Thank you.</p> <p>We need more of this sort of school work!</p> <p>The students seemed able to formulate a plan, exact steps necessary to complete said plans and execute those steps. The video projects seemed to draw these executive skills to them.</p>

Essex / Perceptions of Cafeteria Workers *	<p>I feel the students work was pretty good because I got educated on what their jobs are like.</p> <p>Lessons were learned and the films were knowledgeable. Organization was very good.</p> <p>Didn't seem very professional. They also had no specific point of view. Although it was slightly unfinished, it was very well presented and shed new light on the perspective of the lunch ladies.</p> <p>It covered the topic- was understandable and funny.</p>
Missisquoi / Mold Infestation *	<p>The students must have taken class time to complete the project, they had nice explanations to concerns. Great interviews.</p> <p>Very good sound editing, video editing and excellent narration.</p> <p>Since it was directed at students, I think there should have been more student perspectives. Quality wasn't amazing, but good work Interviews were educational.</p>
Riverside / Broken Buildings	<p>Excellent film. I really hope this is a first step toward town improvement and not the end of a great idea.</p> <p>I liked the poems- the students own words and thoughts.</p> <p>It was a youthful perspective on a big issue facing the town. I loved the music and poems intermixed with the pictures and the interviews. It was very insightful.</p> <p>As we all know the old F/G building has never been able to make a profit for the town, it was a waste of money.</p>
South Burlington / Plight of Refugees	<p>I think this was a terrific presentation. You can see how much time and effort the students put into the project. Nice job!</p> <p>The movie itself was moving and enlightening. The discussion afterward demonstrated the involvement of the students.</p> <p>They learned to be open minded to other's needs.</p> <p>Most important it was entertaining. A boring documentary teaches nothing. This was not boring.</p> <p>The students did a fabulous job and their dedication was obvious in the quality of the film.</p> <p>This group developed a relationship as a community with passion.</p>
Twinfield / Culture, Education and Religion in Mississippi	<p>Firm quality, insights into society, value of new friendship.</p> <p>I would imagine that more could have been presented in this video, 10 or 20 minutes longer would have been worthy of more details about the trip and all their learning experiences.</p> <p>The students are passionate about this project. I believe the experience will make them sensitive to the less fortunate.</p> <p>The subject body of the film was very moving. They did a great job.</p> <p>They obviously were affected deeply by this experience and they presented their experience very well.</p>

Five of the seven schools premiered their videos to a community audience. The survey responses from these 197 different community members and parents attending the premiere are provided below.

Table 6. Community Perceptions of Video, Youth Learning and Youth as Community Leaders

	Cabot	Charleston	Riverside	South Burlington	Twinfield	TOTAL
Number of Respondents	27	86	35	27	22	197
	Mean score: 1= strongly disagree with the statement; 5= strongly agree with the statement					
The students' passion for and ownership of this project was clearly evident today	3.4	3.61	3.29	3.63	3.9	3.56
The topics or issues that the students chose to cover in the video address a real community need or interest.	3.86	3.55	3.8	3.78	3.79	3.7
My understanding of the subject matter presented in the video has deepened as a result of my participation in this premiere.	3.41	3.29	3.11	3.54	3.45	3.33
It was evident that as a result of participating in this project that the students learned something about their community.	3.76	3.71	3.4	3.92	3.81	3.7
Students learned new skills that will help them in life.	3.65	3.68	3.46	3.56	3.65	3.64
Students became more knowledgeable about one or more academic subjects	3.59	3.62	3.46	3.7	3.44	3.58
Students developed a deeper appreciation of their community.	3.72	3.58	3.54	3.85	3.85	3.66
	Percentage of respondents* Note, these percentages do not add up to 100% because some respondents checked off more than one response.					
My <i>positive</i> perception of youth as community leaders has been affirmed today.	72%*	59%*	45%	62%*	63%	59%*
I now feel more <i>positively</i> about looking to youth as community leaders after having	31%*	47%*	55%	42%*	37%	44%*

participated in this screening.						
My <i>negative</i> perception of youth as community leaders has been affirmed today.	0%	4%*	0%	0%	0%	2%
I now feel more <i>negatively</i> about looking to youth as community leaders after having participated in this screening.	0%	1%*	0%	0%	0%	0.5%
	1=poor; 4 = excellent					
I felt that the overall quality of the students' work represented here today was	4.0	3.85	3.14	3.85	3.9	3.75

These results suggest that the community members attending the video premiere left with a favorable impression of youth as community leaders, with 44% of respondents claimed to have their perceptions of youth as community leaders improved as a result of attending the premiere. As one teacher observed, *“People tend to only hear about negative things about students. They don’t have any positive contact with them. In this case they saw that the kids could give back to the community, they could behave and act in a very professional way. Being on time, dressing well; speaking well, were all factors into the positive feelings generated out of this.”*

In many cases the topics that the students selected covered important, and in some cases, controversial topics. However, even in instances when the topic was presented with a clear point of view, the community was respectful of the students’ positions. A teacher whose students looked at the costs of war observed, *“When the students said they wanted to do this topic and first said, you know guys, do you really want to do this? I was thinking about myself—I mean, [our town] is pretty conservative. I think [the students’] analysis was respected by the community. I don’t think anyone could argue against looking into alternatives to war or the horrors of war.”*

V. Student and Teacher Assessment of the LCL Project

Overall assessment of LCL project occurring within each school was rendered through a series of 24 questions asked on the final student post experience survey. The results from these questions are posted below. The students were asked to judge each question based on a Likert Scale from 1 through 5: 1= strongly agreeing with the statement; 2=agreeing with the statement; 3= neither agreeing nor disagreeing with the statement; 4 = disagreeing with the statement; and 5 = strongly disagreeing with the statement. The lower the mean score, the more affirming the students were.

Table 7. One-Sample Statistics: Student Post-Experience Assessment of Projects

	N	Mean	Std. Deviation	Std. Error Mean
76. The topic of our video came from our, (the students), interests.	73	1.71	.825	.097
71. The students made most of the decisions relating to this project.	74	1.76	.773	.090
72. We defined a clear problem to address in the video.	74	1.77	.786	.091
73. When we ran into a problem during the project, we were able to solve it and move on.	74	1.85	.696	.081
89. I believe we helped our community learn something new about our topic.	73	1.95	.762	.089
84. We experienced conflicts in our group.	73	2.03	.928	.109
92. I hope other students get the opportunity to do their own Lights, Camera, Leadership! Project.	74	2.03	1.170	.136
81. Our project topic relates to similar issues in other communities (or countries) besides my own.	74	2.05	.842	.098
85. I felt like I could honestly share my thoughts and feelings about the project and the direction it was taking with others on my team.	74	2.11	.853	.099
74. We were challenged to think about our learning goals in this project.	74	2.16	.892	.104
82. Young people and adults working together were involved in every step of the project.	74	2.19	.822	.096
77. This project had (or will have) a very positive impact on our community.	74	2.22	.880	.102
88. My thinking about our topic changed over the course of the project.	74	2.23	.869	.101
90. I think that our video will help to create change for the better.	74	2.23	.944	.110
70. I felt as if we (the students) really owned this project.	75	2.24	1.137	.131

69. Over the course of this project, we were able to draw connections between several different academic subjects (for example, English, social studies, math, science, computers, art, business, music, etc).	75	2.35	.993	.115
91. I feel that I know my teacher(s) better because of this project.	74	2.36	1.067	.124
86. I developed a lot of trust with my classmates on the team.	74	2.38	.855	.099
83. We were asked to regularly reflect on or think about our experiences as they were happening.	74	2.39	.963	.112
75. We addressed a real community need in this project.	74	2.49	3.724	.433
80. As a result of this project, I have a greater sense of appreciation for where I live.	74	2.53	1.113	.129
87. I now feel like I'm an expert in something new as a result of my participation in this project.	74	2.58	1.060	.123
78. As a result of this project, the adults in our community now see us as community leaders.	74	2.73	.911	.106
79. As a result of this project, I see myself now as a community leader.	74	2.82	1.064	.124

These results suggests that the student felt that the LCL projects were, in general, well executed, resulting in good outcomes in terms of final products and students' overall experiences. The most affirming responses that students gave pertained to the high degree of student involvement and investment in decision-making. The mean score for the following questions were all below 2, suggesting that the majority of students responded "strongly agree" to the following questions: The topic of our video came from our, (the students), interests; The students made most of the decisions relating to this project; We defined a clear problem to address in the video; and When we ran into a problem during the project, we were able to solve it and move on. Students, in general, also felt as if their project addressed real community issues and gave their communities something to consider.

Within their focus groups and interviews, the students and teachers were asked to discuss the challenges that they faced over the course of the project. These challenges are listed below, along with any summative statements made by either group that tended to capture the group's sentiments.

Both teachers and students cited the following challenges:

- **Meeting deadlines**
- **Variability of student motivation** (e.g. students dropping out; lacking energy for the project)
- **A lot of work loaded at the back end:** " We had to get the kids out of study hall in order to finish the video. The video wasn't completed when the class officially ended"

- **Uneven work loads: e.g. only a few can do editing at once:** *“Only a certain number of kids can edit. What do the others do? Some felt more comfortable with doing the technology,, but what do the others do”?*
- **Challenges with working in groups**

Teachers cited the following challenges:

- **Schedules-- finding long enough time blocks to get work done; having access to technology:** *“Our original plan was to do LCL once a week, but we ended up doing it 4 days a week. It really needs a space all of its own to be done right. Even if it is a shorter more intense chunk of time. We had the issues entwined with LCL and media literacy.”*
- **Integration with standards and GEs**
- **Lack of common planning time between teaming teachers**
- **Limited access to technology** (e.g. in some cases not enough computers or cameras to work with)
- **Number of students involved in the project either too large or too small**
- **Disparity in technical skill level between students**

Students cited the following challenges:

- **Frustrations with the time it took to begin using the video equipment**
- **Coming to compromise on the video topic and/or editing details**
- **Lack of money to cover some costs**
- **Lack of teacher motivation or experience**
- **Multiple teachers having different requirements / expectations**
- **Setting up the interviews/managing logistics of video shoots**
- **Student perception that it wasn’t “fun”**

The challenges listed above reflect the complexities related to educational projects of this nature. The LCL curriculum incorporates problem-solving, place-based and service-learning dimensions, and thus faces challenges that are common to offering curricular opportunities that involve partnering with communities in which “real world” problems are addressed and hard deadlines are dictated by external constraints.

VI. Impact of LCL on Student Learning

A major consideration in the research design pertained to the impact of the LCL curriculum on student learning outcomes. Two data collection instruments were used to document and assess these outcomes: interviews with teachers and student focus groups and a pre & post survey to students (see appendices for copies of both instruments).

A. Knowledge about the subject matter of their video.

In all cases the students in the student focus groups reported learning a great deal about the subject matter of their video. The section below offers a selection of quotes from students regarding what they learned about their topic:

Table 8. Acquisition of Topical Knowledge

TOPIC	STUDENT COMMENTS ON LEARNING ABOUT THIS TOPIC
The Preservation of Organic Farming:	<p><i>I learned about farming business issues. Farmers do this work because they like to, not to make [a lot of] money.</i></p> <p><i>I learned a lot more about farming—the business side.</i></p>
Costs of War:	<p><i>I learned about what happens in war.</i></p> <p><i>I learned about how war really is. How graphic war is.</i></p> <p><i>I learned how much about war is kept a secret. How many people wanted to keep some things that happen in war quiet.</i></p> <p><i>I learned that some people deny the Holocaust.</i></p> <p><i>More people are affected by war than I first thought.</i></p>
Perceptions of Cafeteria Workers:	<p><i>I learned that there is more to the eye than what you see, meaning, that I became much more aware of my surroundings and the perceptions of myself and others.</i></p> <p><i>There is more to the lunch than just the food.</i></p> <p><i>Judgments [about people and their roles] should not be made until you know the whole story.</i></p> <p><i>I learned there are topics within topics.</i></p>
School and Community Responses to Mold Infestation:	<p><i>I learned a lot about the science of mold.</i></p> <p><i>I learned how hard it is to get something done in this town. It took forever to raise the money to fix the problem.</i></p>
Fixing the Broken Buildings	<p><i>I learned that people have been interested in doing something about the buildings for quite some time now.</i></p>

	<p><i>I learned that people tried to get money to fix up the buildings.</i></p> <p><i>It is a lot more work to make change than I thought.</i></p> <p><i>I learned that it is easier to think up ideas, but more difficult to make it happen. It is hard to see people who have been working on this for a while.</i></p> <p><i>I learned that a lot of people want to make changes in this town.</i></p> <p><i>That people actually do care about the buildings.</i></p>
A Teenager's Place on Church Street	<p><i>It is hard to go down to Church St. and not spend money.</i></p> <p><i>There are not a lot of places to just hang out. That was really the point of the video: to see what Church St. was trying to do to accommodate teens.</i></p>
Refugee Experiences in Burlington:	<p><i>I did not know the difference between a refugee and an immigrant. Now I do.</i></p> <p><i>I learned about the adversity facing the refugees.</i></p> <p><i>It was challenging to describe the project to people who might not understand English very well.</i></p> <p><i>I learned about how refugees impact our community.</i></p> <p><i>This project made me more sensitive to issues facing refugees, I'm more apt to ask questions...</i></p> <p><i>We were shocked that refugees only get help for 8 months. It was felt as though that was not long enough.</i></p> <p><i>How program funding is an issue and other short comings of the process. There were different perceptions of the scope of this as a problem.</i></p> <p><i>It seems to me to be an overwhelming task to be thrown into American culture...</i></p>
Schooling, Religion and Culture in Mississippi And Vermont	<p><i>I learned about my own education system here in Vermont: they teach to the test in Mississippi; funding is tied to what you get on the test.</i></p> <p><i>I learned about the culture—how different things can be even when we are in the same country.</i></p> <p><i>I learned about the history of education.</i></p> <p><i>I learned how religion, culture and how big their schools are. How they have different perceptions of justice...</i></p> <p><i>I think that our education is a lot more personal, that we have a lot of say in what we learn and how we learn it.</i></p> <p><i>I learned about having a voice in your education. Being close to your teachers here—can talk to them about anything.</i></p> <p><i>It made me appreciate what I have here.</i></p>

B. Fields of Knowledge

Each school adapted the LCL curriculum to existing curriculum along a continuum of full integration to no integration at all. Of those schools that did some integrating or adaptation of academic disciplines, most connections were made to the social studies curriculum. In response to question 69 on the student post survey: “Over the course of this project, we were able to draw connections between several different academic subjects (for example, English, social studies, math, science, computers, art, business, music, etc)” the total mean score across all schools was 2.35, suggesting that students agreed with this statement.

A social studies teacher from Charleston observed that her students, *“Realized what a historical artifact really is, and how to protect and preserve that. The student were into having the interviews preserved by the VT Folk Society. That their work will be used a primary source of info about WWII or Iraq or the Holocaust.”* She spoke of how the video project was tied into units relating to the Constitution and the history of American warfare, with the latter topic emerging from the students’ interests.

Students who focused on the broken down buildings in their community were said to gain knowledge of local town governance and community organizing.

In some instances the students learned a great deal about evaluating media sources. A teacher from Charleston observed, *“They learned how to evaluate sources. After hearing how Mr. Whiteway spoke about the Holocaust and the process of taking your humanity away, and then having the students go to an Aryian Race website... That was an invaluable learning opportunity. Here is Mr. Whiteway and his credibility and there is this website... They will carry that throughout their lives. They won’t be as gullible.”*

Students from Cabot tied their LCL project to a social studies course on media literacy. By undertaking the production of the video they were able to relate their work to that of larger media outlets. One student observed, *“We learned that we could edit our video to make the farmers seem like they said something that they did not mean. We learned that we should not do that—that we were not supplanting what we wanted them to say with what they actually said.”*

Social studies teachers from other participating schools observed how the project connected students to a sense of the past, present and future, the operations of local town government, and locating resources in the community.

The other academic discipline that was tied to LCL projects was language arts or English. Teachers from many of the participating schools spoke of how they had student writing business letters, persuasive essays, poetry, personal or reflective essays tied to the video project.

C. Student Development of Assets, Vital Results and Civic Learning

The student pre and post survey attempted to measure changes in students' dispositions and attitudes towards a number of "asset" development factors. These factors included: self esteem; sense of future; concern for others; personal responsibility; team work; conflict resolution; leadership; care for community; appreciation of diversity; communication skills; relationship with adults; and perspective taking. The results of comparing the mean scores between student pre and post survey responses to multiple questions addressing each of these factors revealed no conclusive evidence of students reporting substantive shifts (either positive or negative) along any of these factors.

**Table 9. Results of Paired Sample Test: -Post Student Surveys
N=59**

		Paired Differences					t	df	Sig. (2- tailed)
		Mean Differ- ence	Std. Dev.	Std. Error Mean	90% Confidence Interval of the Difference				Std. Error Mean
					Lower	Upper			
Self Esteem									
Pair 1	Q6 - 6 b	.119	.768	.100	-.048	.286	1.187	58	.240
Pair 2	Q16 - 16b	.070	1.450	.192	-.251	.391	.365	56	.716
Sense of Future									
Pair 1	Q7 - 7b	.000	1.273	.166	-.277	.277	.000	58	1.000
Pair 2	Q9 - 9b	-.052	.907	.119	-.251	.147	-.435	57	.666
Pair 3	Q16 - 16b	.070	1.450	.192	-.251	.391	.365	56	.716
Pair 4	Q20 - 20b	.183	.892	.115	-.009	.376	1.591	59	.117
Personal Responsibility									
Pair 1	Q10 - 10b	-.119	1.084	.141	-.355	.117	-.841	58	.404
Pair 2	Q11 - 11b	-.119	1.115	.145	-.361	.124	-.817	58	.417
Pair 3	Q13 - 13b	-.138	.712	.093	-.294	.018	-1.475	57	.146
Pair 4	Q14 - 14b	.017	.731	.095	-.142	.176	.178	58	.859
Pair 5	Q15 - 15b	.034	.878	.115	-.158	.227	.299	57	.766
Pair 6	Q17 - 17b	-.254	1.044	.136	-.481	-.027	-1.871	58	.066*
Team Work									
Pair 1	Q12 - 12b	-.203	.961	.125	-.413	.006	-1.626	58	.109
Pair 2	Q21 - 21b	-.150	1.246	.161	-.419	.119	-.932	59	.355
Pair 3	Q23 - 23b	-.167	1.107	.143	-.406	.072	-1.166	59	.248
Pair 4	Q24 - 24b	-.050	1.048	.135	-.276	.176	-.369	59	.713
Conflict Resolution									
Pair 1	Q22 - 22b	.067	1.023	.132	-.154	.287	.505	59	.616
Pair 2	Q47 - 47b	-.017	.813	.105	-.192	.159	-.159	59	.874
Leadership									
Pair 1	Q26 - 26b	.051	.955	.124	-.157	.259	.409	58	.684

Pair 2	Q27 - 27b	-.283	.865	.112	-.470	-.097	-2.536	59	.014*
Pair 3	Q35 - 35b	.085	.702	.091	-.068	.237	.927	58	.358
Pair 4	Q36 - 36b	.119	.853	.111	-.067	.304	1.069	58	.290
Concern for Others									
Pair 1	Q8 - 8b	-.051	.860	.112	-.238	.136	-.454	58	.651
Pair 2	Q19 - 19b	.067	1.006	.130	-.150	.284	.513	59	.610
Pair 3	Q29 - 29b	-.050	1.064	.137	-.280	.180	-.364	59	.717
Care for Community									
Pair 1	Q25 - 25b	-.100	1.145	.148	-.347	.147	-.676	59	.502
Pair 2	Q28 - 28b	-.100	1.085	.140	-.334	.134	-.714	59	.478
Pair 3	Q30 - 30b	-.017	1.066	.138	-.247	.213	-.121	59	.904
Pair 4	Q34 - 34b	.051	1.332	.173	-.239	.341	.293	58	.770
Appreciation of Diversity									
Pair 1	Q31 - 31b	-.067	.989	.128	-.280	.147	-.522	59	.604
Pair 2	Q32 - 32b	-.233	2.733	.353	-.823	.356	-.661	59	.511
Communication Skills									
Pair 1	Q37 - 37b	.000	.947	.123	-.206	.206	.000	58	1.000
Pair 2	Q38 - 38b	.068	.888	.116	-.125	.261	.586	58	.560
Critical Thinking									
Pair 1	Q39 - 39b	-.119	1.052	.137	-.348	.110	-.866	58	.390
Pair 2	Q41 - 41b	.250	.836	.108	.070	.430	2.316	59	.024*
Pair 3	Q42 - 42b	-.133	1.157	.149	-.383	.116	-.893	59	.376
Relationship to Adults									
Pair 1	Q40 - 40b	.050	1.156	.149	-.199	.299	.335	59	.739
Pair 2	Q48 - 48b	-.033	1.073	.139	-.265	.198	-.241	59	.811
Pair 3	Q49 - 49b	-.017	1.066	.138	-.247	.213	-.121	59	.904
Perspective Taking									
Pair 1	Q43 - 43b	-.169	1.147	.149	-.419	.080	-1.135	58	.261
Pair 2	Q44 - 44b	.033	1.178	.152	-.221	.288	.219	59	.827
Pair 3	Q45 - 45b	-.200	1.038	.134	-.424	.024	-1.492	59	.141
Pair 4	Q46 - 46b	-.203	1.284	.167	-.483	.076	-1.217	58	.228

In deciphering these results the reader is asked to look at the mean difference column. If this number is positive, it suggests that the students from all schools combined reported positive changes. A negative number suggests that all students combined register a negative change in response to the question. A confidence interval of 90% was used to determine the extent to which these results were statistically significant. Of the 44 questions asked the results from only three questions can be said to be statistically significant. Student responses to question #17: "I think it is important for people to follow the rules" shifted to the negative over the course of the LCL project, meaning that they felt less inclined to follow rules. Student responses to question #27: "When I see something that needs to be done. I try to get my friends to work on it with me," also shifted to the negative over the course of the LCL project, meaning that they were less inclined to seek friend's help to get things done. Student responses to question #41: "I

am able to give reasons for my opinions” shifted positively over the course of the LCL project, meaning that they felt as if they were better able to state their opinions.

No other means comparisons could be said to be statistically significant. Even in the case of the three questions in which there was statistical significance cited above, it is impossible to claim that the LCL curriculum was a significant factor in shaping these changes.

Paired samples tests were conducted based on student grades grouped by middle and high school, with little difference in overall responses than as reported in the aggregate. Likewise, the one school with the poorest executed project was pulled from the analysis resulting in very little difference.

An analysis of the student focus groups and teacher interviews did generate some consistent patterns in responses. All students and teachers interviewed were asked to cite what they feel that the students learned as a result of their participation in the LCL project.

The table below provides a set of representative quotes from students and teachers that address the majors themes of: student development of dedication and perseverance; student development of communication skills; student development of team work skills; student development of perceptive skills; and student development of civic responsibility. These generative themes were then applied to student post experience assessment of the projects (see table 7) to provide this triangulated analysis.

Table 10.
Impact of LCL on Student Development of Assets and Civic Responsibility

THEME	POST EXPERIENCE SURVEY RESPONSES RELATING TO THIS THEME	MEAN SCORE (see Table 7)	REPRESENTATIVE QUOTES
Dedication and Perseverance In 7 of the 8 participating school students and teachers reported that students made significant sacrifices (missing field trips, staying after school, coming in on weekends) in order to complete the	“When we ran into a problem during the project, we were able to solve it and move on.”	1.85	<i>It is a lot more work to make change than I thought. (student)</i> <i>I learned to stick with it despite the frustrations. (student)</i> <i>I learned about persistence. I learned to stick it out even as others were dropping out. (student)</i> <i>I learned that if you push your boundaries that you usually get rewarded. (student)</i> <i>For a good product you need a lot of patience and a lot of hard work. (student)</i> <i>I learned about working on a deadline. (student)</i>

project.			<p><i>They worked after hours on the project. (student)</i></p> <p><i>Making a movie takes a lot of dedication. (student)</i></p> <p><i>One high school teacher observed, "We saw a lot of growth in the kids over the time. They took it very seriously. The fact that they chose the topic really made a difference." (teacher)</i></p> <p><i>The kids came in on weekends, stayed after school. (teacher)</i></p>
Development of Communication Skills	"I felt like I could honestly share my thoughts and feelings about the project and the direction it was taking with others on my team."	2.11	<p><i>How to be more confident in interviewing others. (student)</i></p> <p><i>It took patience to schedule the interview. (student)</i></p> <p><i>I stretched myself because I'm generally not comfortable talking with people that I don't know. (student)</i></p>
Development of Team Work Skills	"I developed a lot of trust with my classmates on the team."	2.38	<p><i>I learned how getting the majority of a group to agree on something takes awhile. (student)</i></p> <p><i>I learned that you have to cooperate with everyone, because if not you end up arguing all of the time and get nothing done. (student)</i></p> <p><i>We had to be willing to listen to other people's opinions. (student)</i></p> <p><i>It is easier to work in a big group than by yourself. (student)</i></p> <p><i>I learned that if everyone is off doing their own thing, nothing get done; that you have to work together to accomplish anything. (student)</i></p> <p><i>I learned that people have different strengths in terms of who they are and how they work. (student)</i></p> <p><i>I learned about the challenges that come up when you are working with others who are different, but also similar to you. Sometimes it is harder to work with people who are more like you. (student)</i></p> <p><i>How to get along with others. Differences arose around the topic of the video. (student)</i></p> <p><i>I learned to have faith in other people's skills. (student)</i></p> <p><i>I learned about organization. I learned a lot about collaboration. (student)</i></p> <p><i>I learned that you cannot do this by yourself, but that you also can't carry other people along. (student)</i></p>

			<p><i>You have to look at what other people are saying and that you have to learn to compromise. (student)</i></p> <p><i>That you have to learn how to compromise. At first I wanted things to always work my way, but I learned that that wasn't always the best thing. (student)</i></p> <p><i>"They learned about the level of details needed in a project management process. They got a sense that there is a lot more to the management of a professional project, like , 'what, you mean I had to get her last name?' They had to address some of their own pitfalls. It is a lot easier if the teacher tells them everything." (teacher)</i></p>
Deepening Perception	"My thinking about our topic changed over the course of the project."	2.23	<p><i>I learned that there is more to the eye than what you see, meaning, that I became much more aware of my surroundings and the perceptions of myself and others. (student)</i></p> <p><i>Judgments [about people and their roles] should not be made until you know the whole story. (student)</i></p> <p><i>I learned that it is important to keep an open mind. (student)</i></p>
Development of Civic Responsibility	"As a result of this project, I see myself now as a community leader."	2.82	<p><i>I learned that a lot of people want to make changes in this town. (student)</i></p> <p><i>I learned that it is easier to think up ideas, but more difficult to make it happen. (student)</i></p> <p><i>Leadership doesn't always come from where you think it should come from, that it can come from other people who you wouldn't have thought of as leaders. (student)</i></p> <p><i>I think they learned that they can change the world. They quoted Gandhi. I taught them Gandhi last year. And they incorporated a Gandhi quote right at the end. One said, "let's have this be the last thing they think about...(teacher)</i></p> <p><i>They learned that they had a voice and that their opinions matters. They were told this on more than one occasion by the people who they interviewed. (teacher)</i></p> <p><i>I know they are empowered. They can look out beyond [their own town]. That they can have goals that come out of this—it is quite powerful. (teacher)</i></p> <p><i>They learned that community involvement is a great tool to learn with and a great resource. (teacher)</i></p> <p><i>They learned to give back to their community, what was important to their community.</i></p>

			<p>(teacher)</p> <p><i>I don't think the students developed much of this. In part because most of them aren't from Burlington. They did not see themselves as a part of the community... When we talked about community, we were very unclear about how we defined that. (teacher)</i></p> <p><i>The topic that they chose morphed into something that was disconnected from them. It went more toward the culture of Church St. which led to less investment. (teacher)</i></p> <p><i>They had a sense that what they were doing would be valued by the community and their peers. The premiere was important for this. (teacher)</i></p>
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D. Mastery of technology

A major facet of the LCL curriculum lies in having students use video technology as a tool in the learning process. The results of paired sample t-tests for these questions signified a statistically significant change. The table below provides strong evidence that students' ability to use technology advanced throughout the project. The Likert scale ranged from 1 to 5: 1 = no competency in this area or never adapting the stated practices; 2 = little competency in this area or hardly ever adapting the stated practices; 3= limited competency in this area or sometimes adapting the stated practices; 2= fairly competent in this area or usually adapting the stated practice; and 1=very competent in this area or very often adapting the stated practices. Negative changes in the mean difference suggest positive developments of mastery of technology.

**Table 11. Paired Sample Test:
Pre-Post Student Survey: Mastery of Technology
N=59**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean Difference	Std. Deviation	Std. Error Mean	90% Conf. Interval of the Difference	Mean	Std. Deviation	Std. Error Mean	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Pair 1	Q52 - 52b	-.724	1.448	.190	-1.042	-.406	-3.807	57	.000*
Pair 2	Q53 - 53b	-.644	1.658	.216	-1.005	-.283	-2.983	58	.004*
Pair 3	Q54 - 54b	-.534	1.779	.234	-.925	-.144	-2.288	57	.026*
Pair 4	Q55 - 55b	-1.034	1.564	.204	-1.374	-.693	-5.077	58	.000*
Pair 5	Q56 - 56b	-.695	1.578	.205	-1.038	-.351	-3.382	58	.001*
Pair 6	Q57 - 57b	-.847	1.552	.202	-1.185	-.510	-4.195	58	.000*
Pair 7	Q58 - 58b	-.712	1.682	.219	-1.078	-.346	-3.251	58	.002*

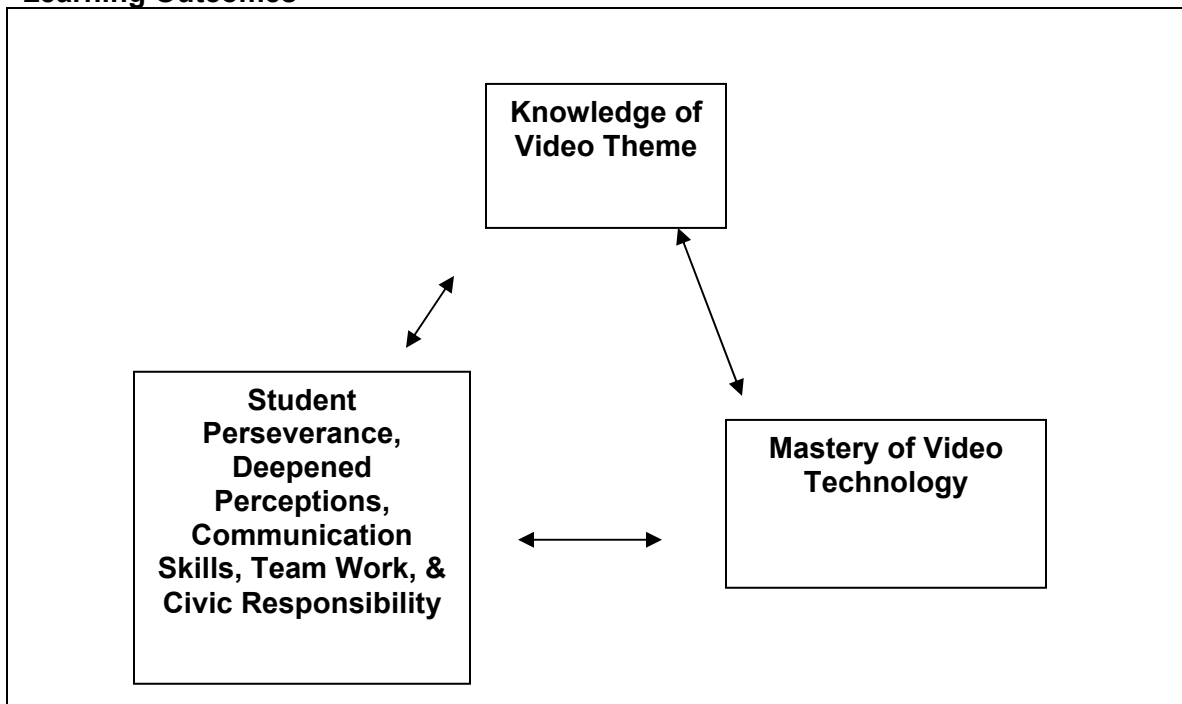
Pair 8	Q59 - 59b	-.695	1.453	.189	-1.011	-.379	-3.673	58	.001*
Pair 9	Q60 - 60b	-1.083	1.700	.220	-1.450	-.717	-4.935	59	.000*
Pair 10	Q61 - 61b	-.644	1.494	.195	-.969	-.319	-3.311	58	.002*
Pair 11	Q62 - 62b	-.667	1.674	.216	-1.028	-.306	-3.085	59	.003*
Pair 12	Q63 - 63b	-.583	1.394	.180	-.884	-.283	-3.242	59	.002*
Pair 13	Q64 - 64b	-.917	1.555	.201	-1.252	-.581	-4.568	59	.000*
Pair 14	Q65 - 65b	-.883	1.851	.239	-1.283	-.484	-3.696	59	.000*
Pair 15	Q66 - 66b	-.424	1.831	.238	-.822	-.025	-1.778	58	.081*
Pair 16	Q67 - 67b	-.949	1.898	.247	-1.362	-.536	-3.842	58	.000*
Pair 17	Q68 - 68b	-.763	1.590	.207	-1.109	-.417	-3.684	58	.001*

These results suggest that in all cases, across all schools, that students did, in fact, learn how to use video technology. The results of the paired sample test for the 17 questions asked of students regarding their level of adaptation of technology show a statistically significance positive change in students' capacity to adapt video technology. The data clearly indicates that LCL had a positive effect in this regard.

E. Conclusions to be Rendered Regarding Student Learning

We may triangulate the data that we have some measure of confidence in: the consistent patterns emerging out of the interviews and focus groups and the statistically significant results from the student pre-post surveys concerning mastery of technology.

Figure 1. Relationship Between Topical Knowledge, Technology Mastery and Learning Outcomes



A summary of results of this evaluation suggest that student participants deepened their level of mastery of video and computer technologies associated with this projects and in the process reported growth in their capacities to persevere through difficult challenges, work together as a team, develop communication and civic skills, and learn a great deal about their video topics. It would appear from these findings that the utilization of video technology within the context of project-based learning supported students' capacity to learn. These findings suggest that curriculum of this nature provides an excellent opportunity to support heterogeneous learning environments through which differentiated instruction can take place.

VII. Implications for Teaching

The implications of the LCL curriculum on teacher roles, identity and practice were raised over the course of the teacher and student interviews. This section draws on common themes to emerge out of these discussions pertaining to youth-adult collaboration; teacher identity; teacher-to-teacher collaboration; teaching practices; and assessment.

A. Collaboration Between Youth and Adults

A composite of the evolving nature of the relationship between the students and the adult teachers may be constructed from the interviews and focus groups. All of the teachers spoke about the importance of giving the authority to make decisions over to their students. Some teachers were more comfortable doing this than others. Some spoke about how difficult it was to trust in the students' capacity to make the right decisions, *"At first you want to see how it all will work out... Once you see it happening, you are able to pull back a lot further. At certain points you are able to give them a few analogies, and that was enough."*

Teachers from several schools felt as though they had to play more active role in structuring the experience for the students. A lack of student motivation, an inability of students to focus on looming deadlines were cited as reasons for greater teacher involvement. One of these teachers observed that, *"As the time crunch set in we had to do more stepping in. Well because I'd never done this before I had no expectations. I did some directing and riding them around certain tasks."*

The teachers in all instances viewed their roles as guides or coaches, occasionally posing questions to students such as, *"have you considered this?"* or *"thought about this angle?"* One teacher observed that, *"My role was to keep the timeline in front of them at all times. We had a milestones chart and a flow chart and a calendar and marked down our meeting days."*

In general, the teachers expressed a heightened appreciation of young people's capacity to make the right decisions. *"I was very pleased with their ownership,"* commented one teacher, typifying this sentiment, adding, *"There were things in the movie that I first questioned as to whether it should be in there, and every time, the kids choices to include it were the right ones, it just all worked out so well."*

Some of the teachers viewed the experience as an opportunity to "co-learn" along with their students. *"It was a shared learning experience and we were working together. I really felt like we were on the same side. That makes for a more open learning experience,"* observed one teacher summarizing a sentiment echoed across most of the schools. Another added, *"Counting on students with their expertise was important. We were all learning. I felt a level of responsibility. They have been given so much responsibility. Can the video actually reflect this experience? Do they get that piece of it?"*

Some teachers thought of their roles as a member of the team. One teacher commented, *"I'm a person who is a big picture person, [therefore] the students needed to be detailed oriented. It gave them a sense that we really are a team.... I'm not a time-based person. I'd take the details people, and asked them to think about the details. I was a member of a team and needed to fit into the group."*

For some teachers the need to let the students direct the project posed challenges to their own identities as teachers. They spoke about the need to exert some control over the process. One teacher observed, *"I understood that there is a definite philosophy: let the students empower themselves. There were moments that I felt the need to steer it, but I backed off. I was most concerned about the potential community perceptions of the outcomes."*

B. Teacher Identity

All of the participating teachers shared a common commitment to excellence in teaching. The extent to which their teaching styles fit in with the collaborative nature of LCL curriculum varied. Some participating teachers have been working with students in a collaborative manner for a number of years. In these cases, the LCL project was a valuable extension of their existing practice. In other cases, however, the collaborative nature of the LCL called for teachers stretching themselves. One such teacher observed, *"LCL fits what I know I should do, but generally don't do. My learning style is generally very verbal: read, study and listen to the teacher. That is how I feel comfortable in learning."* A teacher with a similar approach to teaching said, *"The hardest thing for me was stepping back. Lulls made me nervous. I'm glad I broke through that barrier."* Another teacher commented, *"This has made me more conscious of what I want to be doing as a teacher. I'd like to move beyond the adversarial role. They see you as forcing them to do something. This was about sharing the learning. I felt more like a facilitator in this project."*

With success, some of these teachers were able to engender deeper trust in their students' capacities: *"I realize now that I need them to do their own thinking and analysis. I think in the past I've done the thinking for them—telling them how to think about a given topic. I have a lot more trust in their ability, even if they are still in their concrete thinking stages, they can still do the analysis."*

For those teachers who give their students a lot of voice and choices anyway, the experience was affirming. One such teacher observed, *"For me it is hard to justify doing anything else. It is so rich for the students."* This same teacher recognized, however, the challenges with this kind of teaching, adding, *"It was hard to juggle this class and the other expectations. My other responsibilities suffered."*

C. Collaboration Between Teachers

In all of the school except one, a team of 2 to 3 teachers worked together on the LCL project. In most cases, these teachers found the ability to team with other teachers an essential component of the curriculum. The most common pairing was that of a traditional classroom teacher with a technical education teacher, librarian, or information technology coordinator. In other instances, two classroom teachers collaborated, with one person assuming the role of the technology support person. Within these teams the teachers were able to divide the labor and generally support one another throughout the process. By having a partner, they were able to reflect on the project. One teacher commented that this, *“colleagueship, really helped to keep me focused on the right things (in this instance, giving the kids the authority).”* As a team they were able to overcome certain challenges that they faced, such as scheduling class time, interfacing with the community and communicating with other schools staff.

At least one teacher team experienced challenges in coordinating activities between them. Different styles and assumptions around who was to do what led to confusion.

D. Implications for Teacher Practices

All of the participating teachers saw other uses for video production within their other teaching. They viewed the creation of videos as another form of assignment that may be woven into future projects that they offer. As we will discuss later in the report, a number of teachers will incorporate video technology into other teaching contexts. Still other teachers will draw on these experiences to challenge themselves to give students more freedom to make choices regarding their learning. Several teachers spoke of how their experiences with LCL have lead them to reconsider their teaching styles to be more inclusive of student voices and providing students with greater opportunities to make informed decisions about their education and learning.

E. Assessment and Grading

When asked on the post-experience survey to respond to the question: “We were asked to regularly reflect on or think about our experiences as they were happening,” the mean score from all students was 2.39, suggesting that most students either strongly agreed or agreed with this statement.

The schools varied significantly in how the students were assessed. In those instances where the LCL was integrated very closely to a social studies curriculum, the teacher tested the students on their acquisition of specific pieces of knowledge: *“How does this Constitution affect you today? Do you understand the articles, etc. They took tests on the Articles and the amendments, the concept of war in American society. Compared costs and wounded in every war. They understand the nature of warfare, why we went to war... the difference between war and military conflict. I needed to see that those pieces were there.”*

In other instances particular writing assignments pertaining to the LCL project were assigned and graded. Other teachers relied on a variety of rubrics provided by Helen Beattie and Jay Hoffman. Some teachers relied on written qualitative assessments of students. Still others gave students grades based on their level of commitment and contribution to the project.

In one instance where LCL was used within a teaching advisory, no grades were given at all. The teachers involved in this configuration cited significant problems pertaining to student motivation and accountability. They tried offering other incentives as means of bringing about desired behaviors.

The extent to which students were assessed, how they were assessed and the relationship between this assessment and grading hinged on the teachers' philosophy of assessment and grading. Some teachers used standards and grade expectations (GE) routinely within their teaching and found ways to incorporate them into their grading frameworks. Other teachers do not use standard or other fixed measures to assess students and instead rely on subjective determinations to assess and grade students. It is not to say that the latter teachers did not incorporate rubrics, lay out expectations for students, and document their assessment practices.

F. Sustainability of LCL

When asked if they would hope that other students should have an opportunity to do their own LCL project, the mean score was 2.03, meaning that most students strongly agreed or agreed with the statement: "I hope other students get the opportunity to do their own Lights, Camera... Leadership! Project." The students clearly saw a value in having other students engage in a LCL project.

Each teacher that was interviewed was asked to ascertain the extent to which they would offer LCL again and in what form. Their comments would inevitably draw upon the list of challenges cited on page— of this report. They were quick to say that the logistical challenges facing project of this nature can not be taken for granted. That recognized, a number of teachers did plan on doing LCL, in some form, again. Some possible avenues that they hope to explore include: offering an "LCL light" version, adapting part of the LCL curricular to digital photo portfolios, and rethinking how LCL fits in to existing curriculum. Some schools have connected LCL-like projects to grant proposals that they hope will provide the infusion of resources to better support the curriculum. In one school, the LCL project has spawned a new course focusing on the problems addressed in the video. All of the teachers recognized the need to get students to start using the technology sooner in the process. As a result of this experience, one school is revamping their technology sequence to systematically introduce video production throughout the elementary school grades. In this way, students will be well prepared for the technological challenges of LCL at the middle and secondary school levels.

IX. Conclusions

In the opening paragraph of this report we list a set of assumptions that inspired the creators of the LCL curriculum and those teachers who have chosen to adopt it. As a way of providing some summative statements regarding what can be learned through this assessment, we will draw on these assumptions to structure this conclusion.

- **Evolving information technology has a role to play in educating students.** The overall success of all of these LCL projects suggests that yes, new information technologies do have a major role to play in educating students, and that the LCL curriculum proved to be an extremely useful structure in this regard. Students were able to deepen their capacity to work with video and computer technology. Some of them gained more confidence by doing so. Some of them became inspired to think about video themes, certain fields of knowledge, and their own growth and development through their use of these technologies. Several students are considering a career path in videography.

Technology was integrated into this project based on the belief that many non-traditional students- those hands-on learners who do not thrive in an educational system which is predominantly verbal, would be affirmed in this context. The results of this evaluation suggest that this assumption has been confirmed. By triangulating the statistically significant results regarding student mastery of technology with the qualitative results from student focus groups and teacher interviews, we can assert with a moderate level of confidence that students with diverse learning styles, skills and strengths benefited from the LCL projects and the principles of differentiation associated with them.

- **Schools possess a civic mission to provide their students with opportunities to be contributing citizens of their communities.** All of the participating school tackled topics that were relevant to their local communities. Community members viewing the students' final products were, by and large, very impressed by their efforts and developed a new or deepened an existing appreciation of youth people as contributing members of their community. Students were able to speak about the evolution of their own capacities to make a difference. Their involvement in these LCL projects clearly helped them to see this.
- **Students can be trusted to make important decisions regarding what they learn and how they choose to express that learning.** From both student and teacher self reports, the students participating in these projects made most of the substantive decisions pertaining to their videos. Although teachers gave guidance and set boundaries in places, the students selected their topics and made almost all of the editorial decisions.

- **Teachers collaborating with each other and with their students can yield effective learning outcomes.** In all but one school, a team of teachers from differing background and fields of expertise collaborated to support these LCL projects. Although they experienced some challenges with working together, all of these teams found value in the partnership. The combining of technology with other academic fields warranted an interdisciplinary approach to these projects. Thus, teacher collaboration around a project of this nature is needed and can lead to substantive successes.