

A Case Study of Video Technology Use in Small Business Development

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Abstract

This study reports on graduate students' learning experiences with video technology. These graduate students filmed and created short videos as their course projects for the development of a small family restaurant. Through this community engagement and business developing experience, students not only gain solid knowledge and skills in the filming and publishing process, but also learn the value of communication and cooperation. They have established connections with the community and are able to develop their skills and confidence in contributing the knowledge they learn in the course to the real society. This case study with an ethnographic approach was applied in this study to analyse the video data. Research findings indicate that students are committed to solving practical problems that make academic learning meaningful and enhance their social skills, analytical skills, and career development.

Keywords: Ethnographic study, ADDIE, video technology

Introduction

The purpose of this case study is to explore how the digital video technology can be used to promote the development of small businesses. In recent years, the development and application of video technology have penetrated into people's daily lives. Although video technology has been applied to the development of small businesses, there are not many people who conduct academic research in this area. How to combine video technology with the development of small businesses is a convenient method for technology and society. Video technology can help people break through the barriers of communication and clearly communicate powerful information. During a graduate course, the students decided to create video projects for a small Burmese family restaurant on their request for improving the custom flow. The owners of the restaurant came from Burma as refugees.

They would like to have a video published on youtube.com to attract more customers. But they did not know how to make a professional video. So the students came to meet their needs and also this project idea matched the requirement of the course curriculum.

This study focuses on the research question: "How to connect STEM learning with doing in the real world?" The study examines how the learning experience of video technology production was connected into the application of the local community.

Often many companies fail not because they do not have good management, excellent services and products; but they do not know how to represent their organization value, how to promote the image of the company, therefore, to further develop the business. At the same time, how to focus on the promotion of the business feature is also the key to business development. Customer positioning can focus on the use of the available resources to attract customers to consume and promote corporate image. Through conversations with the owners of the Burmese restaurant and observations of multiple field trips, the researchers found that most of the customers who came to the restaurant before the video was produced were new immigrants living nearby, and many were low-income people from Southeast Asia. The restaurant owners wanted to attract more people of diversity to come to the restaurant. For example, they would like to attract more middle-income people from other neighbourhood communities, tourists visiting the Buffalo area, and some middle-class families. The owners also provided different price ranges for different customer groups. They also wanted the customers feel at home in the restaurant. The researchers interviewed and asked the owners, employees, and customers to find out how they felt about the restaurant and how they thought about highlighting the restaurant's characteristics and introducing the restaurant to others.

The owners believe that the support among their family members is the key to their success and the key to allowing guests to eat and build trust. This is also confirmed by the feedback from customers, many of whom are attracted by this close relationship family. Southeast Asia is located in the tropics, mostly in the rainforest environment, so there are many spices and fruits and vegetables used in the ingredients. Their food is bright and colorful. And these can be expressed through video. Bringing this information together and showing it through video in a limited amount of time is the purpose of the video project. The owners hope to increase the restaurant's customer flow through this video production.

Literature Review

Although video technology is ubiquitous in practical applications, and even many businesses use video technology to help business development. For instance, Shaikh, Hada and Shrestha (2018) found that digital video advertising was more efficient than television advertising. There is still yet very little research on the application of video technology in business development. One of the reasons is that because of the rapid development of science and technology in recent years, research has not kept pace with the application. People use video technology mainly in communication, and the purpose of businesses using video technology in business development is to promote their own value to attract customers and investors. Edosomwan and his research team (2011) at Minot State University mentioned "forms of electronic communication (as Websites for social networking and blogging) through which users create online communities to share information, ideas, personal messages, and Other content (as videos)," in the role of "the exchange of information or services among individuals, groups, or institutions; specifically: the cultivation of productive relationships for employment or business". According to Bort's report in 2011, 91% of Internet data would be video based by 2015. And that is exactly what happen now.

The theoretical framework of this study is supported by a constructivist approach and the use of reflective thinking (Dewey, 1938) in learning. Constructivists believe that the learner learns best when he/she is actively engaged. Dewey believed that learning is social action and educators are responsible for providing learners with a meaningful learning environment.

Video feedback can deepen understanding and promote interpersonal communication. Through video technology, people can explicit the process of information through sound, image and interaction (Mills and Pace, 1989). Through the application of video, people can watch videos repeatedly more than once (Faux, 2008). The survival of the businesses lies in the embodiment and promotion of the business value, so business development is to maximize the value.

The emergence of video technology helps people to combine visual information and auditory information to deepen people's processing and memory of information. The establishment of value for people is to repeat important information continuously, to generate trust and to treat this information as the primary. The primary information is the embodiment of value. Active listening and observation, often requiring detailed and clarified content, can help overcome cross-cultural challenges to build trust. It is important to listen to the key ideas and common themes among members, and the ability to frame messages is also important. Vision complements the details that can't be noticed during listening, such as the expression of a person's face or the background of the surrounding environment. The framework involves the perspective of others. In creating a supportive communication climate, responsiveness is as important as the original information being sent, which encourages security to share ideas and take risks that lead to innovation early in the development of ideas (Gibson and Cohen, 2003).

The video can actually record the process of the event, and can also reflect the details of the scene environment. Through the playback of the event process, and the details of the scene environment, people easily release their emotions to establish a memory association (Deep et al., 2010). One of the main advantages of using video technology is that it increases the depth of existing information while providing a clear, simple structure of information. Therefore, it can naturally adapt to the level of competence of various employees who learn through the system. Moreover, it combines the narrative and interactive features of the video with other relevant information, even when introducing routines (Petan, Petan, and Vasiu, 2014).

Research Design

This case study with a specific ethnographic approach was employed for detailed interpretations of video tapes and analysis of video interviews, reflections, which reflected students overall cognitive awareness and communications among the class members and the instructor, the owners of the restaurant and the customers at the restaurant. Ethnography is the branch of anthropology in which different cultures are studied and described.

Ruby (2005) suggested that the ethnographic approach, as the cultural study of video media and as an inclusive anthropology of visual communication, has become increasingly commonplace in training programs and in business. The quick general acceptance of this approach bodes well in educational research. The video ethnographic approach honors not only the objects of our attention, but mostly the real person with face and name and body that articulates her or his cultural experiences and learning process in shareable forms (Guo, 2009). A major difference between ethnographic and other research methods is the depth and intimacy of the subject under study.

Data Sources

In this study, the data collection includes student course work, filed trips, interviews, observations of class activities, video projects and student reflections. Research site was at SUNY Buffalo State. Another site is a local small business "Lin Restaurant", established by a refugee family from Burma, where students had a chance to deepen their understanding of Myanmar culture and their perception of the business's value, and to break through language barriers to help restaurants promote their business development.

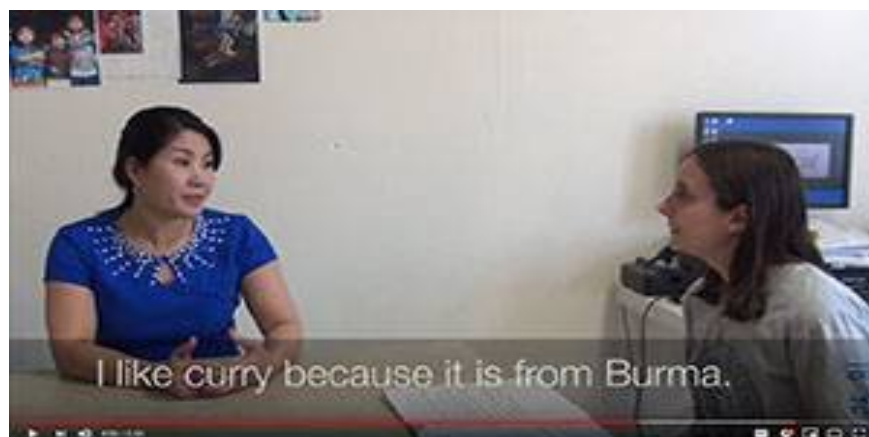


Figure 1. Student interview with the owner

Students took a few field trips to Lin Restaurant interviewing the employers, employees and customers. There are a lot of businesses in Buffalo Westside that are family owned, and the Lin restaurant is one of the family businesses. Their owners, employers and employees are mostly from the same families. The curiosity of customers towards Southeast Asian culture and the attraction of the temperament of Buddhist values are one of the main reasons why they choose to come to Lin Restaurant. While creating the video, the students put the text on the video in order to help viewers better understand the owner's recording.

Curriculum Design

The ADDIE model was used as a framework in this study for the curriculum design. ADDIE is an acronym for the five steps of the design process; analysis, design, development, implementation and evaluation. The first two sections of this research project addressed the analysis portion of the ADDIE model. That includes identifying the problem, learner needs, and the time frame in which the content should be taught. The next portion of the model focused on how the material was designed, developed, implemented and evaluated.

ADDIE Model: Analysis



Figure 2. ADDIE Model

The nine students from the graduate course EDT610 were divided into two groups and asked for a field interview with Lin Restaurant in Buffalo Westside. Through multiple interviews, the students gathered and analyzed the information. Each group of students was required to create a video at the end of the semester based on their best information to help Lin Restaurant promote their business. Most of the students come from local Caucasians, so there were some communication barriers in terms of culture and language when helping the owner's families from Burma. Students also needed to collect useful information through other means, as far as possible to record the interview process, such as through social media and other immigrants from Southeast Asian countries.

ADDIE Model: Design

Students were required to enhance their technical communication skills through this video project. With their knowledge in their respective fields, they would help local community cultural integration and economic recovery through the curriculum organization. The project was designed to help students to communicate technically with people from other cultural backgrounds through the production and application of video making skills in the course. The students were required to use the skills learned in the course to strengthen their communicative skills and overcome difficulties in communication barriers. First, the students were informed about the project to help Lin Restaurant to expand their business. Students went to restaurants and talked to the owners of the restaurant to learn about their culture and their food. Then through the online search engine and social media the students gained further understanding of Burmese culture and living habits and brainstormed their interview questions. In the next few field trips, the students asked questions and interviewed the owners. They learned about the family background and culture of the owners and to further understand the restaurant's advantages in location selection and food handling. After returning to the classroom to exchange ideas and sum up experience, the students decided to make videos as advertisements focused on the people who came diversity cultural background to help promote the business by highlighting cultural characteristics and dietary advantages.

ADDIE Model: Development

The students organized the information collected by their respective groups and edited the story lines of their respective videos. Through different story lines, the two groups of students evaluated each other's work. In the classroom, the two groups of students scored each other's work and gave constructive comments. Then the respective groups further revised and modified their own works, and finally submitted the works to the owners to review and then made final corrections to their needs for advertising. Finally, the final version was published as an advertisement on social media.

ADDIE Model: Implementation

The professor lectured the filming skills and video editing skills in class and in field trips. Students taught each other according to their respective backgrounds and promote teamwork by teaching their technical knowledge to other students. In the process of teamwork, different students had taught others new tools. These tools included picture in picture, green screen and iTunes Mac screen filming. With these tools, students could better refine their work. At the same time, students also used the network's AI translator to help them communicate better with people of different languages. Finally, students then published their own videos in social youtube.com media as an advertisement.

ADDIE Model: Evaluation

Students communicated with each other throughout the project phases to evaluate the work and then continued to improve according to the needs of the owners. When the students and the professor thought that each group of students' works were in line with the technical standards, they gave the video projects to the owners for the final evaluation. The final version was determined by the needs of the owners and the course requirements.

Results and Discussion

Lin Restaurant is located in the Buffalo Westside with a large number of new immigrants and refugees. Therefore, customers who go to restaurants come from all over the world. In order to produce videos, the students in the class conducted a field trip, visited the community to collect data, and then divided into two small groups to create and published two videos for Lin Restaurant.

One of the video was post on to YouTube by the owners, the link is connect to the video: <https://youtu.be/5fxm0gZUCrs> (youtube.com).

Some students went to the restaurant several times to collect data separately and met employees and customers. Students were gratified that they shared their data and interviews in class. In addition, we organized the entire class as a group for site visit and arranged group interviews with employers, employees and customers at the restaurant. Students got enough information for video production. From these experiences, students realized that they needed to organize skills and technical exchanges to reach out to the community. They learned how to serve others through participation, communication and understanding.

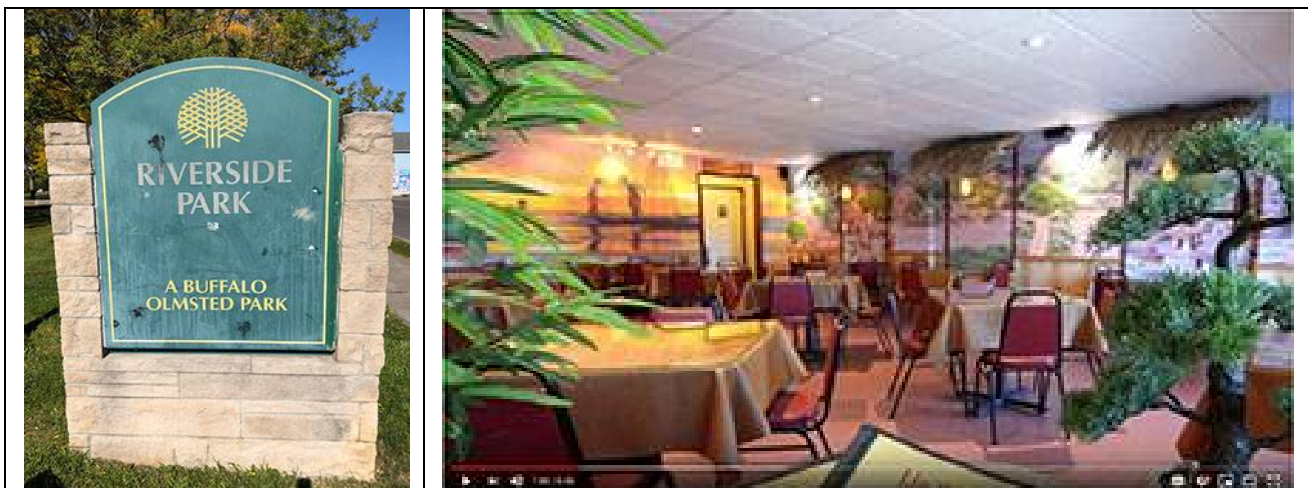


Figure 3. Location of Lin Restaurant

Lin Restaurant is located at Buffalo Westside's beautiful attractions, Riverside Park, on the banks of the Niagara River. The owners chose this location for its beautiful view of the Niagara River and also for the Burmese community in this area. In this beautiful environment, the interior design is elegant Burmese pictures full of their culture, and the dining environment makes people feel relaxed.



Figure 4. The display of Burmese culture and value

In order to display of Burmese culture and value, the students put text over the video to enhance the readability of the video information.

The owners embody their values through daily life and the operation of restaurants, making the restaurant with special characteristics of their belief and religion and Burmese culture. They attract customers by presenting the cultural characteristics of Southeast Asia, while demonstrating the qualities of Buddhism and peace of mind to make customers feel at ease.



Figure 5. The restaurant's working environment and food

The students even got footage of the kitchen at the restaurant with the permission of the owner. The colorful Burmese food provided rich information for the video project. Many customers are allured by the dining environment and ingredients of the Burmese food. The environment here is quiet and elegant, allowing people to relax and enjoy the food. These ingredients are imported directly from Southeast Asia and carefully selected by the owners for cooking.



Figure 6. Green screen to edit information

In the production process, the students added the introduction section using the green screen feature to make the video professional and informative. The images in figure 6 are the results of green screen. The left image was captured from the video showing the student demonstrating how to order food using cell phone; the right image was also the effect of green screen. The students rehearsed several times with the scripture of introducing the restaurant in the green screen studio. Every student participated in the rehearsal. Some played the role as cameramen; some performed as speakers; some took the role as a director. Some of the speakers were nerves in front of the camera, so they had to practice and learned to keep calm.

The green screen video was filmed with a green background in a video studio, and then was merged into the background image or video. The students enjoyed this activity. By participating in this performance, they learned how some of the TV programs were produced as well.



Figure 7. Visitors' photo and thanks note

After the video was published on youtube.com, the researchers went to visit the restaurant several times during the length of six months. The owners repeatedly indicated that customers have been growing even the prices of the dishes have been increased 20% compared to the price before the video was created. The owners were very satisfied with the video.

Conclusion

Prior to this study, most of the students did not have any experience in using video technology. Yet, once they became committed to the project, the students were motivated to learn from the instructor, and from the collaboration that developed among their peers. At the very beginning of the semester, none of the students understood how the project was going to be completed. Through the video project, they built solid skills of video technology design and creation. Learning from doing is proved to be an effective learning strategy. After the video was published on youtube.com, the owners repeatedly indicated that customers have been growing even the prices of the dishes have been increased 20% compared to the price before the video was created.

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