

THE EFFECT OF CAMPUS NEWS VIDEO LIBRARY ON SECONDARY VOCATIONAL SCHOOL STUDENTS' SENSE OF RESPONSIBILITY AND SELF-AWARENESS ABILITY

BaiQiao Zhu¹ and Kien Tsong Chau²

¹Hechi Vocational Education Center School Guangxi, China

²Centre for Instructional Technology and Multimedia, Universiti Sains Malaysia,
Penang, Malaysia

ABSTRACT

This research investigates the Campus News Video Library (CNVL) to confirm whether it has a significant impact on the cultivation of students' sense of social responsibility and self-awareness ability. The finding shows that there were differences in social responsibility among students of different grades, and there were also differences in the ways in which students of different sexes were affected in self-awareness. These findings not only enrich the understanding of the effect of CNVL on students' learning, but also provide useful reference for educational practice and further research. In summary, the research results show that CNVL could serve as an effective teaching tools to improve the moral education level in general, and social responsibility and self-awareness of secondary vocational school students.

KEYWORDS

Network Protocols, Wireless Network, Mobile Network, Virus, Worms & Trojan

1. PROBLEM STATEMENT

At present, the moral education of students in secondary vocational schools is a concern of many educators. The first problem is that the level of self-discipline, frustration tolerance and hard work are at new low in this digital era. In 2023, there were 110,000 high school students nationwide. However, many of them were not qualified to enter the senior high school. As a result, many students engage inferiority, lack the experience of overcoming difficulties, neglect their own spiritual construction and the spirit of hardship (Yu & Ke, 2023). Many of them demonstrate certain degree of hedonism in thought by indulging in material comforts.

Secondly, the secondary vocational students face greater psychological pressure than other peers. They often suffer negative comments from society and people around them. The most common problem they face is interpersonal communication. When they cannot cope well the communication with others, they tend to encounter cognitive failure (Ying, 2023). People with low self-esteem are sensitive, afraid of socializing, easy to blame themselves and afraid to fight for it (Nursiman Guli, 2019). These problems hinder their self-motivation, thus making them timid and afraid to develop themselves.

Thirdly, the current CNVL is often only used as an advertisement, entertainment, and publicity channel rather than an educational platform (Zhong, C. & Gang, Li Yan, 2013). For example, instead of providing a platform for students to learn, share and interact, it is often used as a communication tool to convey advertised products, or merely serve as information dissemination channel for the school to display the school's educational achievements and student activities. All these make students lose interest in learning through current CNVL.

Finally, secondary vocational school students lack of cognitive ability to learn from teachers in traditional classroom. They often give up their efforts because of their weak ability. They can be easily tired of learning. They can be easily distracted in in class, inability to uplift their spirits, and easily engage into negative emotions. As a result, they perform poorly in academic activities. A form of technology capable to enhance their cognitive ability is in need.

2. RESEARCH OBJECTIVES (RO)

RO1: Testing a video technology named Campus News Video Library (CNVL) for secondary vocational school students to find out whether CNVL have an impact on the social responsibility of the students. The potential of CNVL in developing the social responsibility provide us optimization strategies for moral education for the students.

RO2: Investigate whether CNVL affects the self-awareness ability of secondary vocational school students, so as to understand the potential role of gender factors in shaping students' self-awareness ability. w Roman font.

3. RESEARCH QUESTIONS (RQ)

The following broad questions guided this research:

RQ1: Does CNVL have different influences on students' sense of social responsibility in different grades?

RQ2: Does CNVL have different effects on students' self-awareness ability?

4. RESEARCH FRAMEWORK

Figure 1 shows the conceptual framework adopted in this research. The independent variable this research is the Campus News Video Library (CNVL) which has potential influence on these two dependent variables in this research. Self-awareness ability and sense of responsibility were set as the dependent variables in this research. In the context of this research, the self-awareness ability is the ability of secondary vocational school students to assess their own strengths, weakness, limitations, and capability. Self-awareness ability demonstrates the student's ability to understand themselves, recognize own world view, thoughts, culture, ethics, and values. This self-awareness is important because it forms the basis of other psychological profile such as self-observation, self-evaluation, self-experience, self-monitoring and self-control. To a large extent, it also signifies an essential symbol of students' psychological maturity (Lu, 2014).

Sense of social responsibility, on the other hand, is the secondary vocational students' consciousness of ethical responsibility for the well-being of society (Bandura, 2006). It reflects the students' concern over the social problems, and thus takes the initiative to solve and improve the situation. The sense of social responsibility involves the individual's concern and behavior on social fairness, justice, environmental protection, social welfare, family responsibility, national responsibility as well as professional self-responsibility. Possession of

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 this sense not only materializes the moral training goal of secondary vocational education in China, but also an effective measure to strengthen moral education in schools, which is of great significance to building a harmonious society and realizing the great rejuvenation of the Chinese nation (Wang, 2013). Overall, it is related to how one aware of their duty to be a good member of the society.

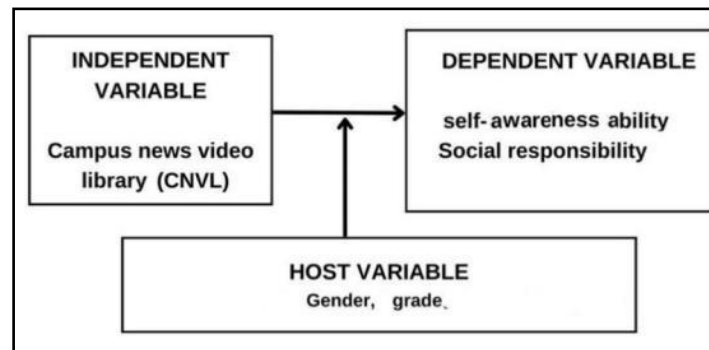


Figure 1. Conceptual framework of this research

5. THEORETICAL FRAMEWORK

This research adopts two theories, namely cognitive theory of multimedia learning (Mayer, 2014; Mayer & Moreno, 2003) and moral development theory of multimedia learning (Kohlberg, 1963; Wu, 2003).

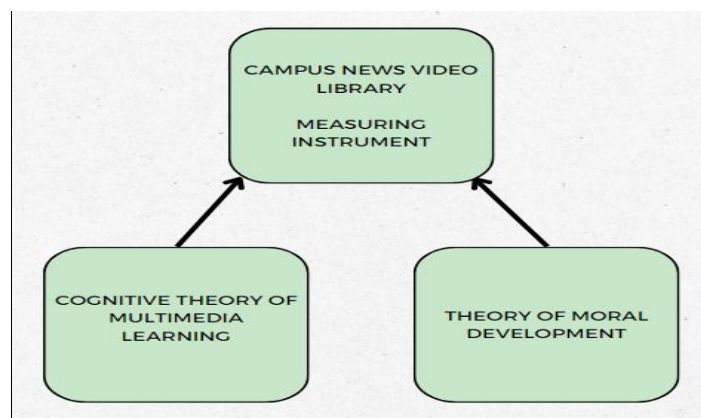


Figure 2. Theoretical framework of this research

The cognitive theory of multimedia learning refers to the theory on how learners could learn effectively from multimedia environment. One fundamental premise of the theory is that students could learn more thoroughly from pictures and text together than from merely from pictures or text alone. This premise explains the reason many people capable of learning new skills from YouTube videos easily. Based on this premise, we choose CNVL for investigation. This is because Youtube release cognitive load, thus forming a deep knowledge structure. This research uses the cognitive theory of multimedia learning to explain the cognitive process incurred during the learning process from CNVL. The cognitive theory provides a theoretical basis for producing videos in CNVL. In the context of this research, the cognitive theory is applied on the video production of CNVL. It is designed in a way that it meets the natural learning way of human brain. When students interact with CNVL video, the integration of visual and auditory elements not only stimulates their interest in the theme, but also helps to

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 deepen their understanding of the contents. Therefore, the CNVL used for this research improves the possibility for students to keep the video contents in long-term memory, as stipulated in the cognitive theory.

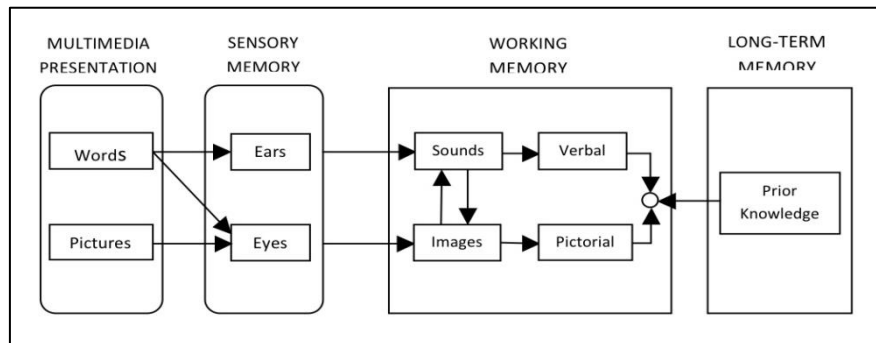


Figure 3. Cognitive Theory Model of Multimedia Learning (Sorden, 2013)

Kohlberg’s Moral development theory is a theory on how individual develop moral consciousness and behaviour. It integrates Kant’s obligation theory, Nietzsche's moral reconstruction theory and Kyrgyzstan’s moral development stage theory. The theory posits that human’s moral reasoning develops in stepwise six stages. It is the result of the environment to which a human is exposed and learned. For instance, teenagers often mimic the actions of their teachers or parents. Based on this theory, CNVL is also a way in which others can be taught the sense of social responsibility and self-awareness ability. In the context of this research, the moral development theory was used to discuss the influence of CNVL on the secondary vocational school students’ moral development.

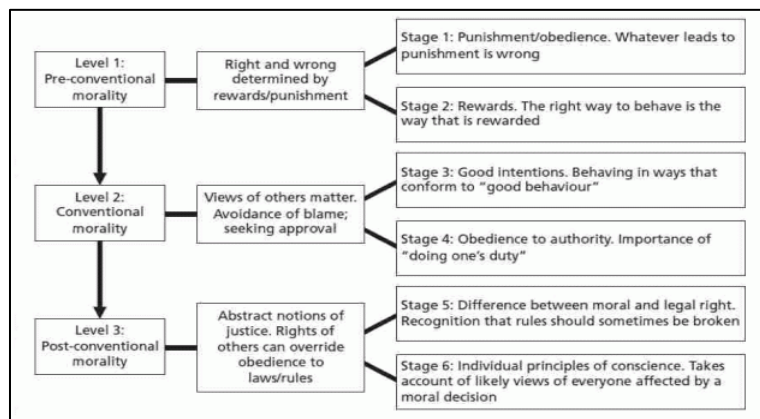


Figure 4. Kohlberg’s Theoretical Model of Moral Development (Kohlberg, 1963)

Based on this theory, to measure this change more accurately, we summarized two variables of students’ “self-awareness ability” and “sense of social responsibility”, and designed these two variables as scale tools to detect the moral changes of secondary vocational school students in a quantitative way.

6. RESEARCH METHOD

This research adopted experimental research design. The research adopted the research design of pre-test and post-test to evaluate the influence of CNVL on the sense of social responsibility and self-awareness ability of secondary vocational school students.

6.1 DESCRIPTION OF RESEARCHED SYSTEM: CNVL

“Campus News Video Library” (CNVL) is a video platform created by students and teachers for students in the campus. More accurately, it is a network-based video resource library. like Youtube, it aims to allow both students and teachers to collect, edit, upload, and download videos, store, and play videos on campus (Jiang, 2020). Because of this vast capability, CNVL become a pool of video resources. Through CNVL, students and teacher are able to watch a wide range of relevant information and knowledge such as social events, documentary, scientific and technological news, humanistic care, social news, students’ activities, sports, campus news, educational information, cultural activities, and moral education. CNVL helps them broaden their knowledge horizons, learn correct values and ideas. Consistent with the characteristics of short videos, videos in CNVL are short and precise. Each video in CNVL last no longer than 2 minutes.

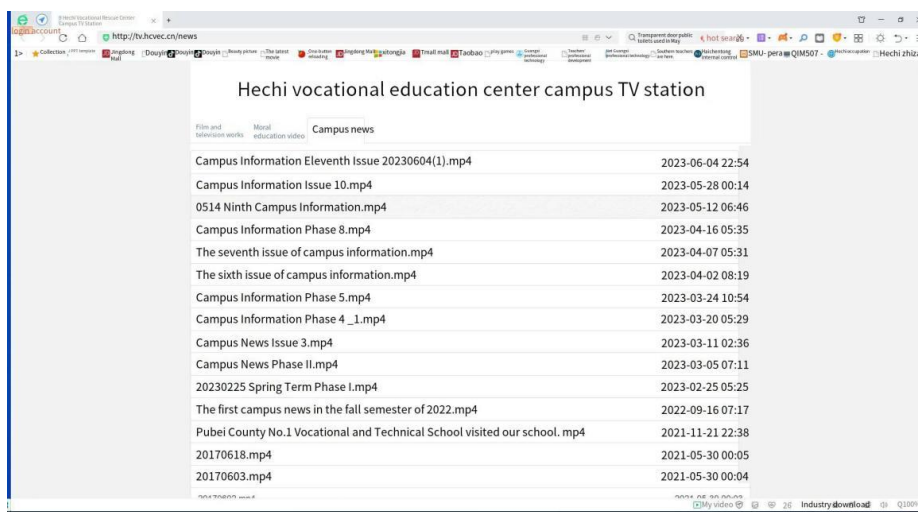


Figure 5. CNVL as a network-based video resource library in campus



Figure 6. Examples of CNVL video in broadcast

Up to students’ choice, they can choose to participate in the whole production process, from script writing to post-production editing and presentation by students, or follow teachers’ guidance. Each issue of CNVL consists of about 6 short video groups. The video library is usually updated once every three to seven days. The finished videos are uploaded to the campus TV station for broadcast. This regular updating helps to keep CNVL active. Meanwhile, it also ensures that students and teachers can access the latest contents at any time. The class teacher would organize students to watch each issue of campus news. The specific use process is as follows:

Students can watch campus news videos retrieved from CNVL conveniently either from Television in the campus or mobile phone. For those who wish to participate in the production

The International Journal of Multimedia & Its Applications (IJMA) Vol.16, No. 1, February 2024 pipeline, they are able to proceed to the studio in the campus as journalists and video editors to learn scripting, topics selection, interview conception, text writing, dubbing, video synthesis, planning, editing, upload the collected videos, shooting, recording, and broadcasting, as shown in Figure 7.



Figure 7. Vocational students are recording campus news in campus studio

By participating in news broadcasting, students can actively participate in the spread of campus news, share their views and opinions, and at the same time provide diversity and freshness for CNVL content. Through the participation of students, the videos produced can better meet the learning needs and interests of students, which also increases their sense of participation and accomplishment. All activities in CNVL strives to provide opportunity for the students to learn and grow. Through personal participation, students can develop their creativity, communication skills and teamwork ability. In addition, they can better understand the complexity of multimedia production.

The CNVL videos used in this research integrates the cognitive theory of multimedia learning. As shown in Figure 7, animated images were used instead of anchors in the system to explain the learning contents so that students' sensory and cognitive experiences are stimulated.



Figure 8. An example of CNVL that broadcasting Campus News by animation anchor used in this research

It conforms to the principle of multiple media forms in Meyer's multimedia 12 principle, and helped students better understand and remember what they had learned.

6.2 RESEARCH SAMPLE

A total of 228 users of CNVL aged between 15 and 18 years old from secondary vocational school students in China participated in the research. This research adopted stratified sampling method. Taking self-awareness ability and sense of social responsibility as the research variables coincides with the age characteristics of the sample. Secondary vocational school students were chosen because they had strong interest and adaptability in multimedia technology, and they are more likely to participate in learning through vision and practice.

6.3 PROPOSED SETUP AND IMPLEMENTATION

The experimental group of this research was conducted in two classrooms. Subsequently, the participants accepted a four-week intervention, that is watching the “Campus News Video Library” for 30 minutes from May 2023 to June 2023. Before the experiment began, we communicated with the school principal and class teacher. After all the preparatory works were completed, the pre-test phase began. Participants were required to answer truthfully all questionnaire according to their own experience. This method aimed to avoid any discussion among participants that may affect the reliability of the results, as shown in Figure 9.



Figure 9. Experimental students watch campus news videos

After the intervention, the same scale was used to collect the post-test data. At the end of the intervention, we used SPSS software to compare the differences before and after SAS test. descriptive statistics, deviation correction, correlation analysis, and multivariate variance analysis were used to analyze the data.



Figure 10. Experimental students watch campus news videos

In the first week, the two experimental groups watched pre-edited CNVL on Sunday night. The video is updated every Sunday night. The content of the video was related to moral stories encountered in daily life. The head teacher played the role of promoting the CNVL and

The International Journal of Multimedia & Its Applications (IJMA) Vol.16, No. 1, February 2024 supervising students, rather than actively guiding the participants. Students in the experimental group could return to their classroom after watching the video, as shown in Figure 10.

After the experiment, the class teacher was present to maintain order, but avoided interfering with the reaction of the participants. They merely focus on providing guidance on how to proceed with the CNVL. This move aimed to maintain the validity of the experiment while minimizing any potential deviation.



Figure 11. The experimental group used mobile phones to fill in the questionnaire

7. THE FINDINGS

In order to find out whether CNVL has influences on students’ sense of social responsibility (RQ1), we adopted average score comparison and independent sample t-test in SPSS to measure the difference. By comparing the average scores differences between social responsibility pre-test and post-test scores of freshmen and sophomores of different grades after watching four issues of video in CNVL, the correlation between grades and social responsibility through two-tailed values were captured in Table 1 and 2.

Table 1. Comparative results of social responsibility of students of different grades in post-test.

Group statistics					
	3.What is your grade?	Number of cases	average value	standard deviation	Mean value of standard error
Average social responsibility	Grade one in secondary vocational school ?	118	3.0127	.98019	.09023
	Second grade of secondary vocational school	86	3.0814	1.16200	.12530

Table 1 reveals that the average post-test score of social responsibility of first-year students is 3.01, while that of second-year students is 3.08. This means that the scores of grade two students were 0.7 points higher than those of grade one students. The data gap between the two grades is within 0.2, showing that the results are highly stable. Based on the results, we concluded that senior students showed a higher level of social responsibility than junior students after four weeks of treatment with CNVL.

Table 2 reveals the average score in the post-test of social responsibility tested using the independent sample t-test in SPSS. The result shows that the significance (double tail value) is 0.65.

Table 2: Results of independent sample t-test of social responsibility in post-test.

		Independent sample test					Mean equality t test			
		Levin variance equality test		t	freedom	Significance (two-tailed)	Average difference	Standard error difference	95% confidence interval of difference	
		F	significance						lower limit	upper limit
Average social responsibility	Assumed equal variance	1.86	.175	-.457	204	.648	-.06868	.15036	-.36516	.22780
	Do not assume equal variance			-.445	163.98	.657	-.06868	.15441	-.37357	.23621

According to the statistical principle, a significance greater than 0.05 indicates a lack of correlation, while a large double-tailed value implies a weak correlation. Based on these results, we conclude that there is no significant relationship between students' grades and their sense of social responsibility after the treatment.

In order to find out whether CNVL has have different effects on students' self-awareness (RQ2), similarly, we adopted average score comparison and independent sample t-test in SPSS to measure the difference. Previous studies showed that female students of the same age may have a relative advantage in maturity. Based on this, this paper attempted to explore whether the learning effects of male and female students were different after receiving the standardized education using CNVL. By comparing the differences of self-awareness between 100 male students and 104 female students after watching four issues of CNVL, the relationship between gender and self-awareness can be captured using double tail value, so as to detect and compare whether there is a significant difference between the relevant mean values. Tables 3 and 4 show the test results.

Table 3. Comparative results of average scores of self-awareness between male and female students in the post-test.

Group statistics					
1.Your gender:		Number of cases	average value	standard deviation	Mean value of standard error
average score of self-consciousness	a) Male	100	3.3090	1.03593	.10359
	b) Female	104	4.0798	.88289	.08657

Table 3 reveals that the average score of male students is 3.3, and that of female students is 4.1, with a difference of 0.8 points in the post-test self-awareness test. This is not only statistically significant, but also concluded that the self-awareness level of female students is higher than that of male students after watching the CNVL for four weeks.

Table 4. Independent Sample t-test of Self-consciousness Average in Post-test

		Independent sample test							
		significance	t	freedom	Significance (two-tailed)	Average difference	Standard error difference	95% confidence interval of difference	
								lower limit	upper limit
Average score of self-consciousness	Assumed equal variance	.197	-5.727	204	.000	-.77081	.13458	-1.03618	-.50544
	Do not assume equal variance		-5.709	194.424	.000	-.77081	.13501	-1.03707	-.50454

Table 4 shows the significance (two-tailed value) in the independent sample t-test of the post-test self-consciousness average score is less than 0.01. According to the statistical convention,

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when the significance value is less than 0.05, it shows that there is a certain degree of correlation. When the two-tailed value is less than 0.05, the significance of correlation is further emphasized. From the results of the table, it can be clearly concluded that after watching campus news for four weeks, it has a significantly different impact on the self-awareness of men and women.

8. CONCLUSION

This research draws the following key conclusions to answer the research questions set in this research. Generally, the CNVL has a significant impact on the cultivation of students' sense of social responsibility and self-awareness ability. The finding shows that there were differences in social responsibility among students of different grades, and there were also differences in the ways in which students of different sexes were affected in self-awareness. The research reveals that there is a correlation between students' cognition of CNVL and post-test scores. It is worth noting that there is a negative correlation between students' grades and post-test scores, while students' gender has a significant impact on post-test scores. These findings not only enrich the understanding of the effect of CNVL on students' learning, but also provide useful reference for educational practice and further research.

In summary, the research results show that CNVL could serve as an effective teaching tools to improve the moral education level in general, and social responsibility and self-awareness of secondary vocational school students. To a large extent, CNVL had exposed the students to moral education contents effectively, which broadens their horizons and enhances their sense of social responsibility and self-awareness. Realizing the potential role of this tool in secondary vocational education, we recommend that CNVL that led to students' positive learning experience in this research should be further extended to other subjects in all learning institutions in China.

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