



EMERGENCY PREPAREDNESS AND SAFETY MANAGEMENT AMONG BPED STUDENTS USING VIDEO INSTRUCTIONS VS TEXT-BASED INSTRUCTIONS

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Abstract

The goal of this study is to determine whether teaching emergency preparedness and safety management through video instruction are more effective and efficient than teaching it through text-based instruction. It also includes a quasi-experimental result and some of its determining factors, including participation of BPED - 3A and 3B students. This subject is timely and pertinent since catastrophes can occur anywhere and at any time, and schools are everyone second home away from home. An emergency can fluctuate in scope and impact by its very nature, which makes it unpredictable. Protecting lives, the environment, and property requires advance planning and preparation. Two groups—BPED 3A (video instruction) (n=30) and BPED 3B (text-based instruction) (n=30)—are involved in the two interventions. Pre-intervention student understanding of emergency preparedness and safety management is demonstrated by the pre-test overall mean score of 24.41 for BPED 3A. Their post-test average is 36.24, demonstrating that they learned more about disaster preparedness and safety management after receiving the video instructions. The pretest results for BPED 3B show an overall mean of 27.48, showing that the majority of people are aware of emergency preparedness and safety management. After the intervention, the total mean is 32.10, indicating an increase in knowledge of emergency and safety management.

Keywords: Emergency Preparedness, Quasi- experimental, Safety Management, Video instruction, Text based instruction

Introduction

This essay compares text-based training vs video instruction to see which is the more effective and efficient learning method for emergency preparedness and safety management. This study provides a thorough grasp of the best teaching style or technique for BPED students taking an online course. The goal of this study is to determine whether teaching emergency preparedness and safety management through video instruction are more effective and efficient than teaching it through text-based instruction. It also includes a quasi-experimental result and some of its determining factors, including participation of BPEd - 3A and 3B students.

This subject is vital and pertinent since catastrophes can occur anywhere and at any time, and schools are everyone second home away from home. An emergency can fluctuate in scope and impact by its very nature, which makes it unpredictable. Protecting lives, the environment, and property requires advance planning and preparation.

A novel approach to disaster management allows for training in safe environments for evacuation and barricading, for example. Students' self-awareness, situational awareness, and active participation in emergency management all significantly increased. The use of video training techniques in the classroom is an ongoing process. The abundance of internet instructional materials suitable for use in the classroom heightens this scenario. The goal of the study is to evaluate the efficiency of video lecture materials for first-year Davao students' statistics knowledge.

Physicians College. The huge gain in their Pre-test to Post-test scores, according to the study, shows that both learning modalities are successful in teaching students the fundamentals of statistics. Although students who were taught using video lecture materials have higher post-test scores than students who were taught using lecture methods, the significance of this difference is never determined. As a result, both the traditional lecture technique and video learning materials are equally successful as tools for statistics training. To accomplish the goals of the study, text-based education with a Pre-test, Post-test control design is used. The experimental group and the control group are form from the participants. While the control group receive lecture-and-discussion education, the experimental group received modular instruction. Both the experimental and control groups perform fairly on the pre-test. The experimental group, which receive modular training, performed better than the control group, which receive lecture-discussion instruction, on the post-test. The pre-test results of the lecture-discussion group and the modular group differed significantly from one another, favoring the latter group. The post-test findings of the control group show a substantial difference in favor of the experimental group. Because there are significant differences between the experimental and control groups' pre- and post-test results, it is determined that modular training is more effective than the lecture-and-discussion method in raising students' biology test scores.

Methodology

Research Design

The goal of this quantitative study is to compare the effectiveness of video instruction vs text-based instruction in improving respondents' understanding of emergency preparedness and safety management. Our responders from the BPE - 3A and 3B students at Tagoloan Community College are the main sources of the data. In this study's quantitative method research, questionnaires are employed to provide respondents a better knowledge of the issues and confidence in their ability to solve them. The current study use quantitative methods to determine the most efficient teaching strategy for emergency preparedness and safety management in order to achieve the aforementioned goal. Exercise simulations and

drills at various levels should be used to test and assess the function in order to accomplish this safety management. Building interagency relationships and becoming more systemic in the management of logistics for safety equipment and convergent staff can both be accomplished through joint planning and implementing the safety management plan and its function.

Research Locale

The study is carried out at Tagoloan Community College, which is chosen because it had third-year Bachelor of Physical Education students who are suitable study subjects. This study is conducted on third-year BPE students at Tagoloan Community College levels 3A and 3B. This study sought to determine how much both respondents knew about safety management and emergency preparedness, which are the two key topics. Following safety procedures for all who participated, the research study is carried out inside Tagoloan Community College.

Result and Discussion

The two participating groups' pre- and post-test results from before and after the intervention are used to compile the data for this study. In order to address the research issues raised in the first chapter of this study, these data are presented, statistically evaluated, and interpreted in this chapter. After the interventions, the interpretation of the results is cross-examined with pertinent theories, literature, and studies from the preceding chapter.

As shown in table 1, two participant groups—BPED 3A (video instruction) (n=30) and BPED 3B (text-based teaching) (n=30)—participated in the two interventions. The pre-test results generally show a mean score of 24.41 for BPED 3A (video instruction) and a standard deviation of 0.73, indicating that the majority of participants' scores range from 26 to 30, indicating that the majority of the students have knowledge of emergency preparedness and safety management prior to intervention. While their post-test overall mean is 36.34 with a standard deviation of 0.34 following the intervention, it is likely that the scores ranged from 31 to 40, indicating an increase in competency knowledge. The pretest results for BPED 3B (text-based instruction) show an overall mean of 27.48 and a standard deviation of 0.96, indicating that the majority of participants ranged in age from 26 to 30. This means that the majority of students have knowledge of emergency preparedness and safety management before intervention, whereas the overall mean after intervention is 32.10, indicating an improvement in knowledge of competencies. Regarding the provided instructional materials, the study's interventions focus on learning preferences and how to differentiate between video and text-based education. A student who reads the instructions before the test boosts their learning in addition to their experiences and depth of knowledge. Lee, et al. (2008), Breimer, et al. (2012), Lloyd (2012), and Tekinarslan, et al. (2013) are some of the few efficacy studies in this area that persistently argue against giving participants a pretest to gauge their level of knowledge. Both text- and video-based instructions are equally effective. The capacity to establish rapport and inspire learners is one of the many appreciated advantages of videos for online learning (Hansch et al., 2015), and video tutorials result in better student performance than text tutorials (Lloyd and Robertson, 2012).

Table 1. Frequency and Percentage Distribution of the Video Instructions and Text- Based Instructions

Range	Description	VIDEO INSTRUCTIONS				TEXT BASED INSRUCTION			
		Pretest		Post test		Pretest		Post test	
		F	%	F	%	F	%	F	%
0-10	BEGINNIN G	1	3	0	0	1	3	0	0
11-19	DEVELOPI NG	1	3	0	0	0	0	0	0
20-25	APPROACH ING	1	3	0	0	5	17	0	0
26-30	PROFICIEN T	27	91	0	0	19	63	5	17
31-40	ADVANCE	0	0	30	100	5	17	25	83
	Total	30	100.0	30	100.0	30	100.0	30	100.0
SD	0.73	0.34			0.96	0.41			
Mean	26.41	36.34	12.97**	.033	27.48	32.10	450**	.066	
	Proficient	Advance			Proficient	Advance			

The table illustrates the test differences between pre-test and post-test for video teaching and text-based instruction. While text-based training receives 5 approaching and advance, 1 beginner, and 19 proficient who have advanced to 25 proficient, video instruction receives 27 proficient, 1 beginner, 1 developing, and 1 approaching. Additionally, it is demonstrated that pre-test mean for video training is 26.41 while pre-test mean for text-based education is 27.48. After-test video training scored 36.34, whereas text-based instructions scored 32.10. Because of the progression from proficient to advanced level, it indicates that both treatments have risen. Therefore, both intervention programs significantly affect the respondent's knowledge growth, which improves the respondent's capacity to carry out emergency preparedness and safety management Breimer, Cotler, and Yoder (2012).

Table 2. Result of the Test of Difference in the video instructions and text based instructions

Measures	Video instructions			p	Text based		T	P
	Pretest	Post test	T		Pretest	Post test		
BEGINNING	1	0			1	0		
DEVELOPING	1	0			0	0		
APPROACHING	1	0			5	0		
PROFICIENT	27	0			19	5		
ADVANCE	0	30			5	25		
Mean	26.41	36.34	12.97**	.033	27.48	32.10	450**	.066
	Proficient	Advance			Proficient	Advance		
SD	0.73	0.34		0.96	0.41			

** Significant level at 0.05 level

In table 3, the performance increase reveals slight, but not statistically significant, changes between the pre-test mean score and the post-test mean score for the two study groups. The difference between the mean scores between the pre-test and the post-test for BPED 3A (video instruction) is 9.93. The post-test mean score (32.10) less the pre-test mean score (27.48) in BPED 3B (text-based instruction) is 4.62. The results of the test to compare the increments in the scores of the two participant groups are shown in Table 3. Their increments do not substantially differ according to the data ($t=.002$, $p=.000$), hence the null hypothesis cannot be disproved.

The effectiveness of the two directions is comparable, according to the earlier conclusion in the previous table (Table 2). Instructions from both intervention programs are probably beneficial in raising students' awareness of safety management and emergency preparedness. This study also supports earlier research that discover no differences between the effects of text and video lessons on student performance (Breimer, Et.Al 2012).

Table 3. Result of the Test of Difference in the Increments of the Two Groups of Video instruction and Text based instruction

Measures	Video Instruction	Text-Based Instruction	T	p
	Means	9.93		

CONCLUSION

As we learn why video instruction is more effective than text-based instruction, because of its audio and visual presentation effectiveness, video instruction is significantly more effective in

helping students achieve the learning outcomes in a lecture as compared to pre-test and post-test models using text-based and video instruction.

RECOMMENDATIONS

In view of the findings and conclusion of the study, the following recommendation are offered

1. Students. All of the respondents are students enroll in the Emergency Preparedness and Safety Management course, so they are more aware about how to be ready for chaos if it arises. They all be aware and knowledgeable on how to use the safety technique.

2. Teachers. Since instructors are a source of information, they can assist students in becoming more knowledgeable and prepared during emergencies. They are able to use all crucial preparation techniques and protocols both before and after a crisis. Based on the analysis and study, they can also increase their expertise.3. School Heads. Since all our respondent is inside the school community School- Heads should also be aware of the safety preparedness of the every individual and also, do an assessment to make sure that every student is prepared in time of disaster.

4. Parents. The primary educators of their children, parents are responsible for teaching them how to avert disasters and respond to them once they have occurred. To ensure the protection of the Family, they need always be alert.

5. Community. Every street should have a sign explaining how to prepare for emergencies and disasters, as well as instructions on how to prevent them. Residents should also receive training to improve their community's preparedness for disasters.

6. Future Scholars. The findings of this study may greatly aid future scholars in their pursuit of related research in emergency preparedness and safety management.

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