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# Industry professionals' perceptions of crisis communications educational needs for new professionals and best practices for Second Life<sup>®</sup> simulations

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*Kristin M. Pennington\* and Leslie D. Edgar<sup>†</sup>*

## ABSTRACT

Crises impacting agriculture cost the nation billions of dollars in expenses and lost revenues annually. Organizations and governmental agencies continue to refocus energies on improving crisis communication plans in an effort to lessen economic impacts of unanticipated events. This study brought together an advisory team of agricultural communications professionals to gather perceptions of crisis communications educational needs for new professionals and to identify the best practices for using Second Life<sup>®</sup> (SL), a 3-D virtual world, simulations for training. Advisory team members represented the human, crop, animal, and environmental sectors of the agricultural industry. Perceptions were gathered during a roundtable, open-ended discussion using questioning techniques that progressed from comfortable, easy-to-answer questions to those that required analytical thought. Participants' comments and discussion remarks were analyzed using a technique to compress similar words into like categories and identify emergent themes. Four emergent themes were noted: 1) Pre-Planning; 2) During Crisis Communications / Actions; 3) Post-Crisis Communications / Actions; and 4) Individual Competencies Needed. Furthermore, multiple scenarios including environmental and product/food safety for SL simulations were noted. Findings from this study were used to identify educational objectives for training professionals in agricultural communications dealing with potential crisis situations.

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\* Kristin M. Pennington is a 2010 graduate in from the Department of Agricultural and Extension Education.

<sup>†</sup> Leslie D. Edgar, the mentor for this project, is an assistant professor in agricultural communications in the Department of Agricultural and Extension Education.

## **MEET THE STUDENT-AUTHOR**



***Kristin Pennington***

I am a native of Rogers, Arkansas, and graduated from Rogers High School in 2005. I transferred to the University of Arkansas as a junior Agricultural Education, Communication and Technology (AECT) major with an emphasis in Agricultural Education. Later, I declared a minor in Agricultural Systems Technology Management. I have been active in multiple student clubs including Ag Mech, AEED Reps, and Collegiate FFA/4-H. I am also a member of Alpha Zeta and Gamma Sigma Delta.

I plan to begin an M.S degree program in Agricultural and Extension Education in fall of 2010 under Dr. Leslie Edgar with continued research using Second Life®, a 3D virtual world for education purposes.

I would like to give a special thanks to Dr. Edgar, the mentor for this project, for her help and encouragement. She has opened many doors for me through this project, and I am forever grateful. In addition, I would like to thank all the faculty and staff of the Agricultural and Extension Education Department for their support.

## **INTRODUCTION**

We live in a society continually affected by natural disasters, such as hurricanes, tsunamis, and forest fires, and by organizational crises, such as food-borne illnesses, corporate malfeasance, and terrorism . . . No community and no organization, public or private, is immune from crises (Ulmer et al., 2007)

Crises have been called “predictably unpredictable” but effective managers know that crises can occur, they just do not know when (Heath and Millar, 2004). Unfortunately, the number of crises impacting citizens and the agricultural and life sciences areas is increasing. In the U.S., the number of Food and Drug Administration (FDA) product recalls, market withdrawals, and safety alerts have increased 10-fold from 36 FDA public notices in 1999 to 388 in 2007 (Buzby et al., 2008). These include food for human consumption, animal/pet food, and drug/personal care products.

The economic impact of recalls can be staggering. In 2008 the largest beef recall in U.S. history occurred when the USDA’s Food Safety and Inspection Service (FSIS) stated that 143,383,823 pounds of raw and frozen beef products from the Westland/Hallmark Meat Company in Chino, Calif., were unfit for human consumption because of improper inspection by USDA food safety personnel (Eamich, 2008). Additionally, recent pet food recalls involved and impacted the human food supply (Paulman, 2008).

Agriculture-related crises are not limited to food recalls. Widespread pet food recalls consisting of many brands of cat and dog foods were initiated in 2007 (Paulman, 2008). The recalls in North America, Europe, and South Africa came in response to reports of renal failure in pets, and the economic impact on the pet food market was extensive, with Menu Foods alone losing \$42 million without taking into account reduced sales (Henderson, 2007). Animal diseases affecting humans have also been at the forefront of crises in recent times. The World Bank estimated in 2008 that the swine flu pandemic would cost \$3 trillion and result in a nearly 5 percent drop in world gross domestic product (Carey, 2009).

The ability to emerge from crises is dependent on an organization’s ability to effectively and efficiently manage through the crisis event. Unfortunately, few organizations are prepared to deal effectively with crises. As of 2005, 60% of all major organizations had a crisis management plan, but only 38% of these organizations had trained key personnel in crisis management skills (AMA, 2005).

The ability to provide interactive, real-world scenarios can reduce the impact and cost of agricultural crises. A wide range of situations requires communicators to handle real and perceived crises involving public health, food safety, and environmental quality. New and experienced communicators need knowledge and skills to prepare for crises, rather than to react to them. Traditional classroom-based instruction can provide a cognitive understanding

of case studies and a review of relevant theory, but it does not provide students with experiential opportunities to develop the competence, deep understanding, and positive attitude that will result in comprehensive communication plans to respond effectively to a crisis.

Second Life® (SL) (Linden Research, Inc., San Francisco, Calif.) is a 3-D virtual world that allows anyone to build an interactive experience or create educational training. In 2005, support systems were created to assist educators in SL. By August 2006, more than 80 SL islands (areas controlled by a specific organization or group) were dedicated to educational and academic use (Livingstone and Kemp, 2006). Educators have identified several characteristics that make SL a valuable educational environment: (a) strong sense of collaborative community, (b) interoperability, (c) interactive learning experiences that are hard and expensive to duplicate in real life, and (d) the ability for true collaboration (Bransford and Gawel, 2006).

The purpose of this study was to interview industry professionals to determine perceptions of educational needs for new professionals dealing with crisis communications and outline best practices for SL crisis communication simulations.

## **MATERIALS AND METHODS**

This exploratory, qualitative based research utilized an advisory team consisting of six professionals. The advisory team was comprised of representatives from production agriculture (livestock and crop), human sciences, and natural (environmental) resources. Participants were chosen to broadly represent the focus of the initial research. The advisory team participated in a roundtable, open-ended discussion where questions were provided by the researchers and conversations ensuing were recorded. Following the discussion, participants' comments and discussion remarks were analyzed.

A literature review by Creswell (2009) found that data from qualitative studies are descriptive and reported as words rather than numbers. General characteristics of this qualitative study reflect those identified by Dooley and Lindner (2002) as appropriate and acceptable methods for studying a phenomenon when:

The natural setting is the direct source of data (qualitative) versus a "snapshot" in time (quantitative); data are collected holistically from a participant's perspective (qualitative) versus relying on a participant's quantitative response (quantitative); the process (qualitative) as well as the variables of interest (quantitative) are considered; data is analyzed inductively (qualitative) versus deductively (quantitative); and data attempts to capture concern for a participant's behavior, attitude, reason, or motive (qualitative) (Dooley and Lindner, 2002)

With any research study, it is important to establish internal and external validity, reliability, and objectivity. In qualitative research, these quantitative based terms are referred to as credibility, transferability, dependability, and confirmability. For this study, credibility and dependability were established using triangulation. Member checks were conducted by providing respondents with a summary of the data to correct any misinterpretations. Transferability was established through the researcher's thick description of interpretations of the data allowing others interested in the study to draw conclusions. And finally, confirmability was established by conducting an audit trail. The researchers used a variety of qualitative methods to ensure truth value, applicability, consistency, and neutrality (Erlandson et al., 1993).

The study followed Krueger's (1998a, 1998b) method of questioning during the roundtable, open-ended discussion with the advisory panel. Researchers led participants through the discussion after the initial question "How does your company deal with crisis communication" was asked. The discussion progressed from comfortable, easy-to-answer questions to those that required analytical thought. Discussions were recorded and transcribed. Transcribed notes were then coded and themes, as outlined in the results, were identified (Creswell, 1998) to determine new crisis communications professionals' educational needs, best practices for crisis communications training, and possible SL simulations. For confidentiality reasons, quotes from team members have been coded using the group letter "A" and then each individual was assigned a number. For example, instead of a quote being noted to a person, it will be noted with quotations followed by "A#" in parentheses.

## **RESULTS AND DISCUSSION**

A set of best practices for training in crisis communication were identified based on emergent themes. Four emergent themes were identified: 1) Pre-Planning; 2) During Crisis Communications/Actions; 3) Post-Crisis Communications/Actions; and 4) Individual Competencies Needed (Table 1). The first three themes (Pre-Planning, During Crisis Communications/Actions, and Post-Crisis Communications/Actions) are necessary for an organization to be successful in both managing and responding effectively to a crisis. The final theme, Individual Competencies Needed, includes skills required for crisis communicators to support effectively and successfully an organization before, during and after a crisis situation. Within each theme, supporting evidence was identified. There were nine subcategories that supported the Pre-Planning emergent theme, two subcategories for the During Crisis Communications/Actions theme, two for the Post-Crisis

Communications/Action theme, and eleven subcategories were identified for Individual Competencies Needed when dealing with a crisis.

Pre-Planning allows for organizations to take a proactive role in preventing and dealing with crisis situations. One participant of the advisory panel stated, "Communicators need an organized list of things to do and steps to take: analyze, identify options, have a plan of action, and analyze what you did" (A2). Effective analysis includes setting up a vulnerability assessment for the organization. A vulnerability assessment will identify possible/potential crises within an organization and also set a plan of action for communicators to follow during an agriculturally related crisis.

During Crisis Communications/Actions, communicators should act quickly and efficiently to "make people aware of what is happening to reduce the snowball effect" (A3). A plan of action established during Pre-Planning will delegate responsibilities during a crisis. Someone should be responsible for assessing media via multiple mediums (print, video, blogs, etc.). Tracking public perceptions and changes in perceptions will enable the company to repair or improve damaged perceptions in post crisis.

Post-Crisis Communications/Actions is the time to assess the organization's actions and the overall outcome from the crisis. This is the time to rebuild public perceptions and redevelop good media relations.

People on the front line of crisis communication must be able to communicate the message effectively. The advisory team clearly identified a set of individual competencies needed for crisis communicators. These competencies are needed in order for the pre, during, and post crisis themes to be successful. Individuals dealing with crises should write the crisis communication plan of action in the Pre-Planning stage. The plan of action will help communicators canvas all critical areas when a crisis occurs and know who to take their message to. Crisis communicators should be critical thinkers who are "able to assess if I do "?", what will happen" (A6). Additionally, individual competencies can be used for hiring or training agricultural communicators.

In addition to the four emergent themes, a set of guidelines preparing students and new professionals to use Second Life simulations were identified. It was noted that individual competencies needed should guide SL crisis communications training scenarios. Many possible SL crisis scenarios were outlined. The scenarios ranged from recent crises such as the Georgia peanut crisis to crises that occurred decades ago such as the Tylenol scare. Additionally, advisory panel members noted that getting students comfortable with "[video] gaming" (interactive technology skills) was a concern for students' ability to learn in the virtual world environment. One professional suggest-

ed, "Students with gaming experience will have increased adaptability and comfort with Second Life" (A4). After students are comfortable, both human and technological monitors will need to be available for additional assistance *in world* (a term used to indicate an individual is logged on to SL) for students to be successful.

Agricultural communications professionals can serve as effective instruments in identifying educational needs for new professionals dealing with crisis communications. This study identified educational needs and potential SL educational training scenarios for crisis communicators. Emergent themes from this study were used to identify educational objectives for training professionals in agricultural communications who deal with potential crisis situations. Dominant competencies from this study include developing and maintaining positive relationships with the media and knowing your audience specifically by needs to allow for quick crisis response. Along with personal competencies in crisis communications, the advisory panel indicated the need for all companies to have a preset plan, of which employees are aware, in place to implement as soon as a crisis occurs. Additional research should continue to identify crisis communication needs for new professionals and whether or not SL is an effective educational training platform.

Following this study, a needs assessment survey will be developed and administered to communication professionals dealing with crisis communications. These needs based studies will assist the researchers in creating a holistic crisis communications simulation in Second Life.

## **ACKNOWLEDGEMENTS**

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**Table 1. Emergent crisis communication educational needs themes and supporting information.**

<b>Emergent Theme</b>	<b>Theme Subcategory</b>	<b>Supporting Quotes From the Discussion</b>
Pre-Planning	Build a positive image of your company/organization	<p>“Unknown companies or companies without a name will find themselves behind the curve.”</p> <p>“Need to get back to building a trust bank.”</p> <p>“Take a proactive strategy, get to know agriculturalists.”</p>
	Build support relationships and networks	<p>“Is there someone that is better to take the information/message to the audience.”</p>
	Complete an organization vulnerability study	<p>“Organizations should complete vulnerability assessments to identify potential crisis plans of action for each.”</p>
	Create a crisis communication plan for action	<p>“Communicators need an organized list of things to do and steps to take: analyze, identify options, plan of action, and analyze what you did.”</p>
	Crisis team role identification and plan	<p>“Every employee must know and follow their role.”</p>
	Identify competency gaps with crisis communications team and look for training opportunities	<p>“Need to invest resources into training personnel.”</p> <p>“Communicators should be trained on good and bad ways to handle crises.”</p>
	Know how to identify warning signs	<p>“Practitioners need to know when to act on a threat and when to ignore it.”</p>
	Know your target audience and how to tailor the message	<p>“There is a need to give audiences the information they need on sensitive topics and find the right way to present the information.”</p> <p>“Know the perception [of your audience] before a problem occurs.”</p>
During Crisis Communications/Actions	Assess change in audience perceptions	<p>“Assess what is happening in movies, print, blogs, etc.”</p>
	Provide information immediately and continually	<p>“Keep communicating with all sectors to keep relationships up and get the message out.”</p> <p>“Make people aware of what is happening to reduce the snowball effect.”</p>
Post-Crisis Communications/Actions	Ability to assess your audience(s) response / reaction to message(s)	<p>“Keep communicating with all sectors to keep relationships up and get message out.”</p> <p>“Look to see what number of individuals got the message and believes us.”</p>
	Improve audience perception of organization product	<p>“There is a crisis every day. How do you spin and solve the problem.”</p>
	Ability to create an effective crisis communications plan	<p>“A protocol is essential because communication issues happen so we need to plan.”</p>
	Ability to research	<p>“Students need to have the ability to think and research.”</p> <p>“Understand what messages work with consumers.”</p>

continued

**Table 1. Continued.**

<b>Emergent Theme</b>	<b>Theme Subcategory</b>	<b>Supporting Quotes From the Discussion</b>
Post-Crisis Communications/Actions (continued)	Ability to be an effective spokesperson	“Must go beyond talking points because they get old and need more general place to start. It is easy to get bogged down in the talking points.” “With audiences it is never safe to assume.”
	Adaptability	“Communicators need to deal with changes and plan for changes.” “Be able to deal with personnel.”
	Assess quickly and respond appropriately	“Communicators need to know if there is someone that is better to take the information, message to the audiences.”
Individual Competencies Needed	Create effective messages (educational pieces)	“When teaching students help them know what types of messages work and what can be said during a crisis.
	Critical thinking	“Be able to assess if I do x what will happen. Need to develop a crisis instinct; what is a crisis and what can I do.” “Being able to understand and respond to triggers.”
Individual Competencies Needed (continued)	Identify audiences(s)	“Being able to identify audiences is the most important.” “Communicators need to know influencer audiences, those that can cause increased impact on others.”
	Identify and gain media allies	“Identify your media allies and spin it [message] in a way they can help resolve and have scientists available for information.” “Know your allies, have a unified voice.”
	Media relationships	“Need media training to get out message.” “Training to help communicator: stay on target and cover key points.”
	Write efficiently and effectively under pressure	“Students need to be able to write efficiently, effectively under the gun.”