

# Effective communication in times of risk and crisis

The IDEA model for translating science to the public

From biosecurity and food security to earthquakes and health pandemics, disaster alerts and warning messages can mean the difference between life and death. The COVID-19 crisis for example can at least in part be ascribed to failed risk communication. At the University of Central Florida, Prof Deanna Sellnow and Prof Timothy Sellnow, experts in strategic communication, are tackling this issue. The IDEA model uses four key components – Internalisation, Distribution, Explanation, and Action – to craft effective crisis communication messages. The utility of the approach has been confirmed across a range of examples, from earthquake early warning to the Ebola crisis of 2014.

In 2009, six scientists and one public official were charged with manslaughter based on failed risk communication regarding the earthquakes in L'Aquila, Italy. This episode typified the uneasy relationships between scientists and policy, scientists and non-scientists, as well as scientists and communicators. Never before has this balancing act been as pertinent as it is now, in the era of information and mass communication, where strategic communication is vital to cut through the noise.

From biosecurity and food security to earthquakes and health pandemics, the warning messages and disaster alerts issued in times of crisis can be the difference between life and death. Most recently, through the current COVID-19 global pandemic, it has become apparent that while scientific facts and political realities are both complex,

doubly so when taken together, effective and simple strategic communication is central to mitigating harm and saving lives. The unfolding COVID-19 crisis can – at least in part – be ascribed to failed risk communication. More effective instructional risk and crisis communication could have prevented the loss of many lives.

At the University of Central Florida, experts in strategic communication are tackling this issue by helping scientists and policy makers through the IDEA model. The endeavour is led by Prof Deanna Sellnow and Prof Timothy Sellnow, both professors of Strategic Communication. With support from the World Health Organisation (WHO) and various agencies of the United States Government (the United States Department of Agriculture, USDA; the Centers for Disease Control and Prevention, CDC; the United States Geological Survey, USGS; and the Department for Homeland Security, DHS), the IDEA model for effective instructional risk and crisis communication is based on decades of research ranging from case studies to qualitative surveys and interviews to message design and testing experiments. Critically, the model provides spokespersons with a framework that is easy to understand, to remember, and to employ. The model

is crucial in helping design effective messages for mitigating harm and promoting self-protection in response to a risk situation or crisis event.

## A STRATEGIC COMMUNICATION MODEL

Effective messaging needs to motivate disparate audiences to pay attention to, comprehend, and take appropriate actions during times of crisis. Grounded firmly in theory and empirical research, IDEA uses four key components – Internalisation (I), Distribution (D), Explanation (E), and Action (A) – to craft messages and communicate them effectively. The utility of the approach has been tested and confirmed across a range of risk and crisis contexts (e.g. food contamination, biotechnology, biosecurity, mass shootings and terrorism, earthquake early warning and forecasting) and across a range of diverse populations within the United States and globally.

*Internalisation* involves the key elements needed to motivate receivers to attend to and remember the message; for example: compassion (people don't care what you know until they know you care about the victims and losses), timeliness (e.g. providing a countdown to strong shaking following an earthquake), proximity (locations and maps), and impact (e.g. in the case of COVID, the impact on health, death, and the economy).

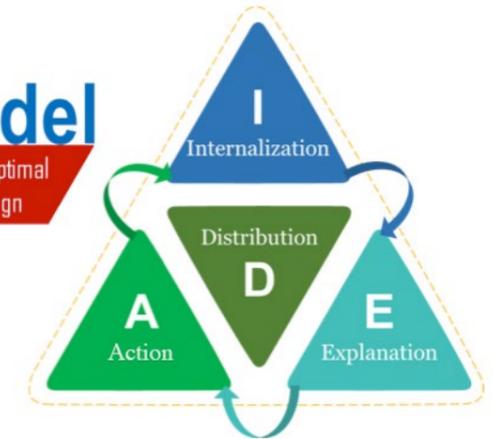
*Distribution* involves the key elements to reach disparate audiences effectively; for example, ensuring consistent messaging from multiple sources (as different audiences seek information from different places) and various communication channels (e.g. TV, radio, face-to-face, apps, Internet, and social media). The COVID-19 crisis highlights the failure of effective distribution – in the United States, US federal government information differed from that of local government officials, and both differed from the information put out by the WHO, the CDC, and health scientists.

*Explanation* involves the key elements to help receivers comprehend accurate information, even if this involves saying, "this is what we know so far and we

## IDEA Model

From Best Practices to the Optimal Instructional Message Design

- ✓ Internalization
- ✓ Distribution
- ✓ Explanation
- ✓ Action



The IDEA model consists of four components: Internalisation, Distribution, Explanation and Action.

**The warning messages and disaster alerts issued in times of crisis can be the difference between life and death.**

will update you as we know more". Importantly, it includes the intelligible translation of science for different audiences (e.g. different languages, different literacy levels) and ensuring trustworthiness of the information source. Oftentimes, trust-building in advance of a crisis is critical. In the case of COVID-19, wrong information about how the virus spreads was widely shared, ultimately worsening the pandemic.

Finally, *Action* involves the key elements to get receivers to take appropriate action. In the case of COVID-19, examples of actions that were variably recommended included washing hands with soap and water for at least 20 seconds, wearing a mask in public, and

social distancing. However, mistakes in *Internalisation*, *Distribution*, and *Explanation* can hamper the *Action* stage. For example, by failing to effectively communicate the risk of contagion from asymptomatic carriers and by playing down the risk to the young and healthy, many people chose to not socially distance.

## IDEA IN ACTION

The IDEA model has been tried and tested in multiple diverse settings. On the West Coast of the United States, IDEA was used to improve earthquake early warning messages (EEW). Based on the four IDEA elements, a phone app (i.e. the *distribution* element) was developed to provide effective



The IDEA model has been used to assess national and local responses to crises, such as the Ebola outbreak in 2014.



