

Directions: *There are 2 passages in this section. Each passage is followed by some questions or unfinished statements. For each of them there are four choices marked A), B), C) and D). You should decide on the best choice and mark the corresponding letter on Answer Sheet 2 with a single line through the centre.*

Passage Two

Questions 51 to 55 are based on the following passage.

A few weeks ago, a well-meaning professor tried to explain the physiological process behind viruses and the human body in a tweet and was immediately criticized for a mistake in his information. He then issued an apology and deleted his erroneous tweet.

Communicating science beyond the academic bubble is necessary to augmenting public understanding of health and environmental issues and helping individuals make well-informed personal decisions.

However, scientists who engage in science communication must acknowledge that even in their area, their expertise is deep but narrow. They need to recognize the constraints in their own knowledge. That is not to suggest that they only write or present on their own research, but rather, that they consult with an expert if the topic is outside of their discipline. Fact-checking with a scientist who works in the specialty will prevent the unintentional spread of misinformation, and the process of doing so may yield tiny pieces of interesting new information that can be incorporated.

Some have argued that the public is not educated enough to understand scientific information, especially for any complex phenomena, but this is absurd. Science instruction can be found at all levels of public education with most secondary schools offering classes on biology, physics, and chemistry. If anything, social media has shown that the public craves knowledge based on a solid scientific foundation. Even the public discourse that follows most scientific articles shows that online readers can understand even the most baffling of scientific principles.

It is equally imperative to emphasize that being an expert on a topic does not automatically make a scholar qualified to communicate it to a nonscientific audience. A number of scientists recently have been offering public-aimed explanations of scientific phenomena. Even though they have appropriate credentials, they often do very little in the way of explaining. One biologist shared an intricate analogy involving a library, books, paper, a recipe, ingredients, and a cake to explain the process behind vaccines. Any explanation that requires a written key to keep track of what each item represents is not a clear example for public consumption.

Science communication is a science in and of itself. It requires rigorous training and instruction. A scientist should take communication courses that can teach a person how to identify and eliminate jargon and how to develop effective analogies to explain complex concepts. One cannot assume communication expertise—imagine if someone just decided that they were a physicist and started trying to contribute to the field without the necessary background. Doing a poor job communicating science to the public will only create confusion and widen the gap between science and society, a gap that scientists are trying to close.

51. What does the author say about communicating science to the general public?
- A) It will help them to keep abreast of the latest scientific developments.
 - B) It is a necessary means to improve their understanding of scientific issues.
 - C) It will get them more involved in academic debates on environmental problems.
 - D) It is an effective way to augment scientists' influence beyond the academic circle.
52. What does the author advise scientists to do to deal with topics outside of their specialty?
- A) Write or present on them from new angles.
 - B) Utilize information from diverse sources.
 - C) Turn to a specialist for professional help.
 - D) Fact-check with colleagues in their field.
53. What does the author say we can learn from social media?
- A) A solid academic foundation is essential to understanding baffling scientific principles.
 - B) Modern technology has facilitated communication between scientists and the public.
 - C) Scientific articles have gained increasing popularity among the general public.
 - D) The public's understanding of science is much better than some have claimed.
54. What does the example of the biologist who shared an intricate analogy show?
- A) It is helpful to use illustrations in explaining scientific phenomena.
 - B) It is imperative to have appropriate titles to explain scientific issues.
 - C) A learned scholar is not necessarily a qualified science communicator.
 - D) A nonscientific audience cannot duly understand principles of science.
55. What does the author suggest scientists do to close the gap between science and society?
- A) Explain complex concepts scientifically.
 - B) Make appropriate use of scientific terms.
 - C) Take courses in public speaking.
 - D) Develop communication skills.