

Overview

This lesson finishes the Communication Systems introduction by covering the processes, outputs, and feedback parts of the Communication System. This lesson should take approximately 40 minutes.

This lesson addresses the following Standards for Technological Literacy:

- Standard 4, Benchmarks D, E
- Standard 5, Benchmark F
- Standard 7, Benchmark E
- Standard 11, Benchmark K
- Standard 17, Benchmark I, J, K

Essential Questions

- What are the three steps in the Processes portion of the Communication System?
- What are the outputs of the Communication System?
- What is the importance of feedback in the Communication System?

Objectives

At the end of this lesson, students will be able to:

- Identify and describe the three steps in the Processes portion of the Communication System.
- Identify and describe the outputs of the Communication System.
- Explain the importance of feedback in the Communication System.

Procedures

- I. Direct students to look at Fig. 8-4 on page 80 of their textbook. Briefly review the Inputs of the Communication System (covered in Session 2)
 - A. People – create the message(s) and operate the system
 - B. Information – knowing the best way to send a message and about the audience
 - C. Materials – essential for fabricating the technology
 - D. Tools and machines – devices that aid in communication of messages
 - E. Energy – provides physical power as well as human physical and mental power
 - F. Capital (Finances) – allow for construction of buildings and manufacture of equipment
 - G. Time – necessary to design and develop new communication technologies
- II. Processes (Have students (one at a time) read a paragraph from the section titled “Processes” on page 90 out loud to the rest of the class.)
 - A. Creating
 - i. Explain that the message is designed and encoded in preparation for sending.
 - ii. Explain that all of the inputs are used at this stage.
 - B. Sending
 - i. Explain that the message is transmitted through a channel (i.e. physical, air, etc.)

- ii. Explain that most (if not all) of the inputs are used at this stage.
- C. Receiving
 - i. Explain that the intended audience receives the message.
 - ii. Explain that most (if not all) of the inputs are used at this stage.
- III. Outputs (Have students (one at a time) read a paragraph from the section titled “Outputs” on pages 91-95 out loud to the rest of the class.)
 - A. Received message
 - i. Explain that the information has been communicated at this point, which was the desired output of the system.
 - ii. Explain that the outputs vary depending on the inputs.
 - B. Positive and negative impacts
 - i. Positive impacts
 1. Explain that communication technologies allow us to communicate over long distances in relatively short amount of time. (Long-distance communication)
 2. Explain that computers enable school administrators and teachers to communicate and manage information much more effectively. (Communication in schools))
 - ii. Negative impacts (review only two impacts)
 1. Explain that recent studies have show violence on television may have negative effects on children. (Antisocial behavior in children)
 2. Explain that personal information and security may be put at risk with easier access to more information. (Privacy)
 3. Explain that some communication devices raise fears of poor effects on health. (Health and safety)
 4. Explain that some communication technologies pollute the earth in some way (i.e. large amounts of water used in paper manufacturing, disposal of old electronic equipment). (Pollution)
- IV. Feedback (Have students (one at a time) read a paragraph from the section titled “Feedback” on page 95 out loud to the rest of the class.)
 - A. Explain that a response to a message is feedback.
 - B. Explain that some feedback occurs immediately while others occur at a later time.
 - C. Ask students to identify examples of feedback that occurs immediately.
 - D. Ask students to identify examples of feedback that occurs at a later time.

Resources/Materials

- *Technology Today and Tomorrow* (Fifth Edition) by Brusica, Fales, and Kuetemeyer
- Chapter 4 Outline (student handout)

Evaluation/Assessment

- Check for understanding throughout the lesson when asking students to identify and describe examples of content being covered
- Chapter 4 Outline (student handout)

Reflection

This lesson was designed essentially the same as Session 1 and I received pretty much the same result. However, in today’s lesson I tried to be more enthusiastic and engaging in my examples and main points. The students responded a little better today than they did the first day. This could be due to the fact that they are becoming more comfortable with me or because they were well rested from a long weekend.

At the beginning of the lesson I started off by asking them to identify and define the seven inputs of the Communication System. I received many blank stares with only about three students understanding what I was asking for. I tried to explain it again in simpler, clearer terms and they still seemed to not “get it.” I wondered if they didn’t learn anything during Session 2, had forgotten it, or still weren’t in “learning mode” after the long weekend. In the end I had to spend a little more time “reviewing” Session 2 material than I had anticipated. Session 2 seems to need a bit more revising before it will meet the objectives I have set for that lesson.