

# Virtual Communications for Managers



with examples and  
hands-on exercises

---

**WEBUCATOR**

Copyright © 2022 by Webucator. All rights reserved.

No part of this manual may be reproduced or used in any manner without written permission of the copyright owner.

**Version:** 1.0.3

## **The Authors**

### ***Sheri Schmeckpeper***

Sheri Schmeckpeper holds Bachelor of Science degrees in Financial Management and Computer Information Systems as well as a Master's degree in Adult Education and Distance Learning. She is a Microsoft Certified Professional and Trainer. Sheri has implemented distance learning programs at three top institutions of higher education, has been a guest speaker on radio, and has presented at local and national training workshops. Her diverse background includes technology, education, interpersonal relations, finance, and management. Sheri has developed and facilitated courses in the areas of instructional technology and online learning, faculty development, communications, finance, and professional development and achievement. She is currently co-founder of the Institute for Instructional Excellence and directs the Center for Excellent Living where she is also a life coach.

### ***Dave Dunn (Editor)***

Dave Dunn, Webucator's CEO, joined Webucator in 2009 after serving as a CFO and COO for numerous small and medium-sized companies, including Summit Software Company, Insight Research Group, Avalon Consulting, and HealthcareOne. Dave received his Bachelor of Arts from Hamilton College and his MBA from Syracuse University. He has served as Chairman of the Board of the Montessori School of Syracuse since 2001.

## **Class Files**

Download the class files used in this manual at

<https://static.webucator.com/media/public/materials/classfiles/VIR101-1.0.3.zip>.

## **Errata**

Corrections to errors in the manual can be found at <https://www.webucator.com/books/errata/>.

# Table of Contents

LESSON 1. Virtual Communication Basics.....	1
The Communication Model.....	1
📄 <b>Exercise 1: Virtual Communication.....</b>	<b>5</b>
📄 <b>Exercise 2: Virtual Communication - Personal Application.....</b>	<b>7</b>
The Importance of Communication.....	7
📄 <b>Exercise 3: The Importance of Communication.....</b>	<b>9</b>
📄 <b>Exercise 4: The Importance of Communication - Personal Application.....</b>	<b>11</b>
The Impact of Miscommunication.....	11
📄 <b>Exercise 5: The Impact of Miscommunication.....</b>	<b>13</b>
📄 <b>Exercise 6: The Impact of Miscommunication - Personal Application.....</b>	<b>15</b>
LESSON 2. Types of Communication.....	17
Synchronous and Asynchronous Communications.....	17
📄 <b>Exercise 7: Synchronous and Asynchronous Communications.....</b>	<b>19</b>
Broadcasts and Exchanges.....	20
📄 <b>Exercise 8: Broadcasts and Exchanges.....</b>	<b>22</b>
📄 <b>Exercise 9: Broadcasts and Exchanges - Personal Application.....</b>	<b>25</b>
Casual and Formal Communications.....	25
📄 <b>Exercise 10: Casual and Formal Communications.....</b>	<b>28</b>
📄 <b>Exercise 11: Casual and Formal Communications - Personal Application.....</b>	<b>31</b>
Secure and Unsecure Communications.....	31
📄 <b>Exercise 12: Secure and Unsecure Communications.....</b>	<b>33</b>
LESSON 3. Types of Media.....	37
The Fundamentals of Media.....	37
📄 <b>Exercise 13: The Fundamentals of Media.....</b>	<b>39</b>
📄 <b>Exercise 14: The Fundamentals of Media - Personal Application.....</b>	<b>41</b>
Communication and Media.....	41
📄 <b>Exercise 15: Communication and Media.....</b>	<b>46</b>
Combined Media.....	48
📄 <b>Exercise 16: Combined Media.....</b>	<b>51</b>
📄 <b>Exercise 17: Combined Media - Personal Application.....</b>	<b>53</b>

LESSON 4. Selection Criteria.....	55
Assessing the Audience.....	55
📄 <b>Exercise 18: Assessing the Audience.....</b>	<b>59</b>
Assessing the Message.....	60
📄 <b>Exercise 19: Assessing the Message.....</b>	<b>65</b>
Technical Considerations.....	67
📄 <b>Exercise 20: Technical Considerations.....</b>	<b>73</b>
📄 <b>Exercise 21: Technical Considerations - Personal Application.....</b>	<b>75</b>
Selecting Media.....	75
📄 <b>Exercise 22: Selecting Media.....</b>	<b>77</b>
📄 <b>Exercise 23: Selecting Media - Personal Application.....</b>	<b>79</b>
LESSON 5. Media Issues.....	81
Overcoming Transmission Issues.....	81
📄 <b>Exercise 24: Overcoming Transmission Issues.....</b>	<b>84</b>
Overcoming Compatibility Issues.....	86
📄 <b>Exercise 25: Overcoming Compatibility Issues.....</b>	<b>89</b>
📄 <b>Exercise 26: Transmission and Compatibility Issues - Personal Application.....</b>	<b>91</b>
Backups.....	91
📄 <b>Exercise 27: Backups.....</b>	<b>93</b>
Malware Protection.....	94
📄 <b>Exercise 28: Malware Protection.....</b>	<b>97</b>
📄 <b>Exercise 29: Backups and Malware Protection - Personal Application.....</b>	<b>99</b>
Creating a “Plan B”.....	99
📄 <b>Exercise 30: Creating a “Plan B”.....</b>	<b>101</b>
📄 <b>Exercise 31: Creating a “Plan B” - Personal Application.....</b>	<b>103</b>
LESSON 6. Group Communication.....	105
Avoiding Hallway Decisions.....	105
📄 <b>Exercise 32: Avoiding Hallway Decisions.....</b>	<b>107</b>
The Art of Group Facilitation.....	108
📄 <b>Exercise 33: Group Facilitation.....</b>	<b>114</b>
📄 <b>Exercise 34: Group Facilitation - Personal Application.....</b>	<b>117</b>
Time Management.....	117
📄 <b>Exercise 35: Time Management.....</b>	<b>119</b>
Proactively Avoiding Problems.....	120
📄 <b>Exercise 36: Proactively Avoiding Problems.....</b>	<b>121</b>
📄 <b>Exercise 37: Proactively Avoiding Problems - Personal Application.....</b>	<b>123</b>

# LESSON 1

## Virtual Communication Basics

---

### Topics Covered

- About the Communication Model.
- To value the importance of communication.
- To recognize the impact of miscommunication.

### Introduction

Virtual communications are any communications that do not take place in a face-to-face environment.



### 1.1. The Communication Model

The Communication Model is a standard description of communication between two people. It demonstrates that communication is a loop with six components, as described below:

1. The sender, from whom a message originates.
2. The receiver, to whom the message is sent.
3. The message, which is the information the sender wants to give to the receiver.
4. Feedback, which is a response sent from the receiver to the sender.
5. Noise, which is any external disturbance that may interfere with accurate delivery of the message.
6. Filters, which modify the formation or reception of the message.

When examining virtual communications, we include one more component:

1. Media, which is the method by which the information is carried from one party to another.

We will now examine each of these components more thoroughly.

### ❖ 1.1.1. The Sender

The sender is the person who intends to deliver a message to one or more people. The sender initiates the conversation and sets the stage for how the communication will take place.

### ❖ 1.1.2. The Receiver

The receiver is the person who receives the initial message. The receiver must decide whether to respond to the message or not.

### ❖ 1.1.3. The Message

The message relays information. Both the content of the message and the method in which it is delivered impact the quality of the communication.

For example, a message spoken over a choppy phone line may result in a misunderstanding that is equally as problematic as a sender who communicates only part of the information over a clear line.

If the information is not delivered appropriately, it is simply meaningless data. All messages should be meaningful.

### ❖ 1.1.4. Feedback

Feedback is a response from a receiver back to the sender, and it tells the sender:

1. The message was received.
2. The message was received correctly.

Some communications are intended simply to broadcast information. Examples include an announcement or a warning. These may not require feedback, particularly if they were sent to a large group of recipients.

Most messages benefit from feedback. Feedback may vary as follows:

1. Feedback may be a simple grunt or an “OK.”
2. Feedback may be a full paraphrasing of what was received.
3. Feedback may request clarification if the message was not clearly understood.

When a sender receives feedback, he or she should:

1. Reply to a paraphrasing of the original message with a confirmation or with clarification.

2. Reply to a request for clarification with more information.

In good communication, the message-feedback loop is repeated until both participants are satisfied that accurate communication has taken place.

### ❖ 1.1.5. Noise

Noise, as it relates to communication, is not exclusive to sound. There are many kinds of noise, including:

1. Environmental conditions.
2. Daily activities.
3. Mental distractions.

In most situations, there will be noise. It is both the sender's and receiver's responsibility to be aware of the noise in their environment and to do what is necessary to overcome that noise. This may mean:

1. Moving into another room.
2. Turning off or setting aside electronic devices.
3. Pausing a project.

In all cases, the effects of noise can be minimized by focusing attention on the conversation and speaker.

### ❖ 1.1.6. Filters

Filters are personal values and ideas that modify the formation or reception of a message. Filters include:

1. Personal biases, including preferences and values.
2. Emotions based on past experiences and traditions.
3. Self-centeredness or self-preservation.

While some filters, particularly emotion-based filters, may negatively affect communication, not all filters are bad. Healthy filters help us discern between right and wrong, and are a part of our evaluation process that we build through experiences and education. The key to good communication is to understand filters and manage them intentionally. A good communicator will:

1. Be aware of his or her personal biases.
2. Consider how his or her values and preferences affect the delivery or interpretation of a message.
3. Control the emotional impact and defensiveness triggered by filters.
4. Respect the other person's perspective, whether or not he or she agrees with it.

## ❖ 1.1.7. Media

Media are tools used to deliver a message. Media includes all devices and transportation systems on which the message travels, including such things as:

1. A phone.
2. A phone line or network.
3. A fax machine.
4. Email.
5. Instant messenger.
6. Satellite transmissions.
7. Traditional mail.
8. The paper and pen used to handwrite a message.
9. A website.
10. An animated graphic on a website.

**Evaluation  
Copy**

In virtual communications, the medium selected for a message may have a great impact on the quality of the communication between two or more people, as we will learn later in this course.

# Exercise 1: Virtual Communication

 5 to 10 minutes

---

Respond to the following questions about virtual communication.

1. List the seven components of virtual communication.
2. Match the following terms with their definitions.

A. Terms:

- i. Feedback
- ii. Filters
- iii. Noise
- iv. Medium
- v. Message

**Evaluation  
Copy**

B. Definitions:

- i. Modifies the way messages are delivered or interpreted.
- ii. Distracts, and may cause messages to be received incorrectly.
- iii. A tool used to deliver a message.
- iv. Tells the sender a message has been received correctly.
- v. Information sent to a receiver.

## Solution

---

1. The seven components of communication are:

- A. The sender
- B. The recipient
- C. The message
- D. Feedback
- E. Noise
- F. Filters
- G. Media

**Evaluation  
Copy**

2. The correct term/definition matches are:

- A. A and I
- B. B and A
- C. C and G
- D. D and H
- E. E and J

# Exercise 2: Virtual Communication - Personal Application

 5 to 10 minutes

---

1. Think about an important phone conversation you have had with another person who was continually interrupted by loud background noises, such as traffic, children, or music or who was hard to hear because of those noises.
  - A. How did the interruptions affect the conversation?
  - B. How did you feel about it?
  - C. Did you notice how the phone distorted the sounds?
2. The next time you are on the phone, listen to the sounds around you. Is your environment affecting the conversation?



## 1.2. The Importance of Communication

Imagine trying to run a business without communication. There would be no way to:

1. Describe to an employee what their job is.
2. Instruct an employee on how to do their work.
3. Correct or commend an employee when they do something wrong or right.
4. Converse with customers or vendors.

It would be chaotic to say the least.

Communication between humans within a social group is as essential as breathing, whether that group is a family, a society, or a business. While this seems obvious, poor communication abounds. Communication can be problematic if it does not deliver the intended message.

Departments and organizations benefit when managers ensure communication is:

1. Of good quality.
2. Available to all staff.
3. Not geographically dependent.

Staff working without information struggle with moments of chaos, and a manager's role is to prevent this from happening.

### ❖ 1.2.1. Water Cooler Communication

In a traditional business environment, much communication and exchange of information is done in random, informal conversations. We pass information on when we run into people:

1. In the hallway.
2. At lunch.
3. In meetings.
4. At the water cooler.

The following are facts that managers need to understand:

1. Relationships are built on repeated exposure to others in both formal and informal settings.
2. Careers are often nurtured through these relationships.
3. Virtual staff can easily be forgotten because they are not able to participate in “water cooler” exchanges. This results in:
  - A. Excellent employees being bypassed for job openings.
  - B. Employees being unable to share their knowledge or concerns.
  - C. Staff feeling unappreciated or forgotten.
  - D. Staff leaving the company.

It is a manager's responsibility to make certain this does not happen by providing equal access to information for all staff, and liberal opportunities for interaction, whether local or virtual.

Something can be equal, but not identical. For example, 2 plus 5 is equal, but not identical, to 8 minus 1. It may not be possible to provide identical communication channels for your virtual employees as you would for employees who work in the same location, but it is possible to provide equal communication.

# Exercise 3: The Importance of Communication

🕒 5 to 7 minutes

---

Answer the following questions about communication.

1. True or false?
  - A. Identical communication should be provided to virtual staff and onsite staff to ensure everyone is treated the same.
  - B. Companies benefit when equal communication is available to all staff.
  - C. Hallway conversations are only available to onsite staff.
  - D. Casual conversations contribute to relationships.
  - E. Equal communication is the same as identical communication.
  
2. Which of the following examples of communication are not available to virtual staff?
  - A. Email.
  - B. A boardroom meeting.
  - C. Text messages.
  - D. Lunch.
  - E. A sticky note.
  - F. A website.

## Solution

---

1.     A. False  
       B. True  
       C. True  
       D. True  
       E. False
  
2.     B, D, and E

**Evaluation  
Copy**

# Exercise 4: The Importance of Communication - Personal Application

 10 to 15 minutes

---

1. If you have ever worked from a home office or at a satellite location in your company, think about how easy or hard it was to get information for your job. If you have never experienced this, consider times when you have missed family reunions, gatherings of friends, or networking opportunities.
  - A. Was information easily accessible?
  - B. Did you have ways to communicate your needs or concerns to others?
  - C. Did you ever miss out on important information?
2. Pause to consider the easy availability of information when you are on site physically, compared to the challenge of getting complete information when you are in another location.
3. Compare the access to information and opportunities for interaction available to your local staff compared to the access and opportunities available to your virtual staff.
  - A. Is it equal?

*Evaluation Copy*  
\*

---

## 1.3. The Impact of Miscommunication

How we present our messages is extremely important. A little change in how a message is delivered can determine whether we communicate well or whether something is miscommunicated. Listed are three examples of poor communication:

1. Notice the difference a comma (or in verbal communication, a pause) can make in this example (from <http://www.woodwardenglish.com/lets-eat-grandma/>):
  - A. “Let’s eat Grandma.”
  - B. “Let’s eat, Grandma.”
2. Here is another example (from [grammarfun.com.au](http://grammarfun.com.au) (<https://grammarfun.com.au/games/game.punctuationmeaning.php>)) in which punctuation (or emphasis) changes meaning:
  - A. “A woman, without her man, is nothing.”

- B. “A woman: without her, man is nothing.”
- 3. Ambiguous pronouns may be confusing to the listener, as noted in these sentences:
  - A. “John and Tyler run a business together and own a truck and a van. He drives it to work every day.”
    - i. Is the driver John or Tyler?
    - ii. Is the vehicle being driven the truck or the van?

If we are communicating directly to another person, we may be able to overcome these errors through voice intonation or body language, because communication is:

- 1. 7 percent words.
- 2. 38 percent intonation.
- 3. 55 percent physical movements.

**Evaluation  
Copy**

However, when communicating virtually, we often do not have our voice or bodies to compensate for the poor use of language structure, so we must be very careful about how we communicate.

There is always a risk that the medium we used to deliver virtual messages may add noise to the message. For example, a fax may not come through clearly, so an “8” may look like a “6”. In the right situation, this could cause a terrible accounting error.

When using mediated communication, noise plays a critical factor in good communication. It is a sender’s responsibility to make certain a message is delivered in such a way that it is almost impossible to misunderstand.

## Exercise 5: The Impact of Miscommunication

 15 to 20 minutes

---

Read the following paragraph from [grammarfun.com](http://grammarfun.com) and follow the instructions:

1. Dear John I want a man who knows what love is all about you are generous kind thoughtful people who are not like you admit to being useless and inferior you have ruined me for other men I yearn for you I have no feelings whatsoever when we're apart I can be forever happy will you let me be yours Gloria
  - A. Rewrite the letter to express love.
  - B. Rewrite the letter to express disdain.

## Solution

---

1.
  - A. Dear John, I want a man who knows what love is all about. You are generous, kind, and thoughtful. People who are not like you admit to being useless and inferior. You have ruined me for other men. I yearn for you. I have no feelings whatsoever when we're apart. I can be forever happy; will you let me be yours? Gloria
  - B. Dear John, I want a man who knows what love is. All about you are generous, kind, and thoughtful people who are not like you. Admit to being useless and inferior. You have ruined me. For other men, I yearn. For you, I have no feelings whatsoever. When we're apart, I can be forever happy. Will you let me be? Yours, Gloria

# Exercise 6: The Impact of Miscommunication - Personal Application

⌚ 5 to 10 minutes

---

1. Referring back to the previous exercise, what does this tell you about verbal communication (written language, verbal emphasis)?
2. Transfer this knowledge to other forms of communication, including body language, visual aids, etc. What seemingly small things can change a message? How might cultural differences play into this?

Evaluation  
Copy

## Conclusion

In this lesson, you have learned:

- About the Communication Model.
- To value the importance of communication.
- To recognize the impact of miscommunication.



# LESSON 2

## Types of Communication

---

### Topics Covered

- ☑ About synchronous and asynchronous communications.
- ☑ The differences between secure and unsecure communications.
- ☑ To recognize broadcasts and exchanges.
- ☑ How to approach casual and formal communications.

### Introduction

There are many ways to differentiate communication. This lesson will take an analytical look at communication in the workplace and explore best practices based on key factors.

---

## 2.1. Synchronous and Asynchronous Communications

The most obvious way to distinguish between types of communication is to separate communication into two categories:

1. In-person, or face-to-face.
2. Virtual.

Within the category of virtual communications, there are many more distinctions. One of the primary distinctions is between synchronous and asynchronous communications. The words “synchronous” and “asynchronous” come from both Latin and Greek.

1. A - means negative, or not.
2. Syn - means equal, or same.
3. Chronos - means time.

Therefore, “synchronous,” means, “same time;” and “asynchronous,” means, “not same time.”

So, communication in which the two parties can talk at the same time is synchronous.

## ❖ 2.1.1. Synchronous Communication

Examples of synchronous communications include:

1. Phone conversations.
2. Chats.
3. Video conferencing.
4. Audio conferencing.

All face-to-face communication is synchronous as well, but synchronous, virtual communication is missing one or more of the following components that we addressed in the last lesson:

1. Words.
2. Intonation.
3. Body language.

## ❖ 2.1.2. Asynchronous Communication

Asynchronous communication takes place when the two parties are not communicating at the same time, or at least they are not expected to. This includes:

1. Email.
2. Traditional mail.
3. Texting.
4. Online forums.

(It needs to be noted that, while the basic concept is the same, we are not referring to the definitions used within the study of data communications. Here, we are referring to human interaction.)

Again, in asynchronous communication, typically one or more components of communication are missing. This is important to note because quality virtual communication finds ways to compensate for the loss of these components. We will address this in a later lesson.

# Exercise 7: Synchronous and Asynchronous Communications

 5 to 10 minutes

---

Complete the following exercises about synchronous and asynchronous communications.

1. Match the terms in List 1 to the terms in List 2 according to the best fit.

A. List 1:

- i. Chronos
- ii. Email
- iii. Same time
- iv. Video conferencing

B. List 2:

- i. Asynchronous
- ii. Time
- iii. Virtual
- iv. Face-to-face
- v. Synchronous

*Evaluation Copy*

2. Label each of the following either synchronous or asynchronous:

- A. Walkie-talkies
- B. Sign language
- C. Sticky notes
- D. A conference
- E. A book
- F. VOIP (Internet phone)

## Solution

---

1.     A.   ii.  
       B.   i.  
       C.   v.  
       D.   iii and iv.
  
2.     A.   Synchronous.  
       B.   Synchronous.  
       C.   Asynchronous.  
       D.   Synchronous.  
       E.   Asynchronous.  
       F.   Synchronous.



## 2.2. Broadcasts and Exchanges

All messages are either broadcasts or exchanges. Broadcasts are announcements. They are often coming from one person and sent to many people, but they can also be between two individuals. A broadcast includes:

1.   Emails announcing policy changes.
2.   Loudspeaker announcements.
3.   Weekly newsletters.
4.   Meeting reminders.

**Broadcasts** are distributions of information that do not expect feedback. Their intent is to inform without discussion.

**Exchanges**, on the other hand, are two-way communications. Exchanges include all components of the communication loop, as learned in the last lesson. Exchanges may begin with an offer of information, as in a broadcast, but there is an expectation of feedback. Exchanges may also begin with a question, seeking information. Examples of exchanges include:

1.   Discussions.
2.   Queries.

3. Event invitations.
4. Brainstorming.

In the previous lesson, we talked about the importance of equal communication with both local and virtual employees. Many managers send broadcasts to their virtual employees, but they neglect to provide opportunities for exchanges with them.

A productive manager will not neglect the important task of providing exchange opportunities for their virtual employees. The complete communication loop provides managers and employees the opportunity to:

1. Communicate well.
2. Build relationships.
3. Express:
  - A. Ideas.
  - B. Concerns.
  - C. Solutions.

Evaluation  
Copy

Additionally, if information is not broadcast clearly or completely, the receiver of the message may become frustrated and unable to perform their work because they do not have a way to seek clarification.

Even with broadcast information, it may be beneficial to provide an opportunity for feedback or questions. For example:

1. A phone number may be included in an instruction manual so users may seek clarification.
2. Within an electronic form, a link may be provided that leads the user to a contact page on the website.



# Exercise 8: Broadcasts and Exchanges

⌚ 5 to 10 minutes

---

Perform the following activities related to broadcasts and exchanges.

1. Fill in the missing words in the following sentences:
  - A. Managers provide information through \_\_\_\_\_ and \_\_\_\_\_.
  - B. Brainstorming, problem solving, and creativity require \_\_\_\_\_.
  - C. When reasonable, broadcasts should include opportunities for \_\_\_\_\_ in case there are questions.
  
2. Which of the following is not a form of broadcast communication?
  - A. A commercial
  - B. A billboard
  - C. A question
  - D. A public service announcement
  - E. A directive
  - F. A label



## Solution

---

1. Fill in the missing words in the following sentences:
  - A. Managers provide information through **broadcasts** and **exchanges**.
  - B. Brainstorming, problem solving, and creativity require **exchanges**.
  - C. When reasonable, broadcasts should include opportunities for **feedback** in case there are questions.
  
2. Which of the following is not a form of broadcast communication? **A question**



# Exercise 9: Broadcasts and Exchanges - Personal Application

⌚ 5 to 10 minutes

---

1. Have you ever been in a situation in which you were given a good deal of information, but were not offered the opportunity to share what was on your mind? You may have experienced this in a classroom, in a business meeting, or with a talkative relative.
  - A. Was the communication a broadcast or an exchange?
  - B. Should the communication have been a broadcast or exchange?
  - C. How could the opportunity for feedback have been incorporated into the communication?
  - D. Why is it important for managers to discern between broadcasts and exchanges?



## 2.3. Casual and Formal Communications

Another way to distinguish communication is between casual and formal communications. Casual communication generally takes place between friends, and formal communication takes place between employees and employers. However, this is not an absolute rule.

### ❖ 2.3.1. Relationships

The relationship between the two individuals often determines the type of communication used. Formal communications are used:

1. To show respect.
2. In professional presentations.
3. When people are not familiar with each other.

Casual communications, on the other hand, are used:

1. When the parties have familiarity with one another.
2. By people who interact with each other regularly.

## ❖ 2.3.2. Formal Communication

The situation also affects the type of communication used. Situations that use formal communications include:

1. Business presentations.
2. Sales presentations.
3. Service and support functions.
4. Intercultural events.
5. Interviews and performance reviews.
6. Events in which protocol is important.

The following are the benefits that are derived from the use of a formal communication style. Formal communications:

1. Give a professional appearance.
2. Avoid misunderstandings.
3. Minimize the possibility of offending the other party.
4. Are clear and comprehensive.

Evaluation  
Copy

## ❖ 2.3.3. Casual Communication

Casual communications are used in settings that do not require the same level of protocol. The degree to which a situation is formal or casual determines the degree to which the method and style of communications are formal or casual. The following are examples of casual or semi-casual situations:

1. Co-workers meeting for hors d'oeuvres after work.
2. Gatherings of friends and/or family.
3. Event ice breakers.
4. Brainstorming events.
5. Team-building events.
6. Team meetings.

Casual communications provide benefits as well. While casual communications may not be as precise or clear as formal communications, casual communications:

1. Relax a tense situation.

2. Provide the opportunity for humor.
3. Provide an open, accepting environment.
4. Use more nonverbal communication.
5. Tend to take less time than formal communications.

### ❖ 2.3.4. Composition

There are many aspects that differentiate between formal and casual communications. In formal communications, great attention is placed on the composition of the presentation.

1. Words are spelled correctly and clearly expressed.
2. Sounds are articulate and appropriate.
3. Images are informative.
4. Conventional grammatical rules are followed.

In casual conversation, the relationship between the parties assumes both parties, to a certain degree, understand each other's intent. In casual communication:

1. Sentences are shortened and contractions are used.
2. Words may be substituted with letters, numbers, or symbols.
3. Accuracy is not emphasized.
4. Cultural expressions and colloquialisms may be used.

In virtual communications, the formality of the situation impacts the words and media chosen to communicate the message.

# Exercise 10: Casual and Formal Communications

⌚ 5 to 10 minutes

---

Perform the following exercises relating to casual and formal communication.

1. The type of communication used is often determined by the \_\_\_\_\_ between the parties.
2. Associate the following with either Formal or Casual:
  - A. A party with friends.
  - B. Applying for a scholarship.
  - C. Protocol.
  - D. Avoiding misunderstandings.
  - E. Sarcasm.



## Solution

---

1. The type of communication used is often determined by the **relationship** between the parties.
2. Associate the following with either Formal or Casual:
  - A. A party with friends. Casual.
  - B. Applying for a scholarship. Formal.
  - C. Protocol. Formal.
  - D. Avoiding misunderstandings. Formal.
  - E. Sarcasm. Casual.

# Exercise 11: Casual and Formal Communications - Personal Application

🕒 10 to 15 minutes

---

1. Describe a situation in which formal communication may negatively impact the outcome of the conversation.
2. Describe a situation in which casual communication may negatively impact the outcome of the conversation.
3. How can one incorporate casual attributes into a formal situation in a way that would benefit the situation (for example, introducing humor)?



## 2.4. Secure and Unsecure Communications

A final, and very important, consideration that affects the method of communication is whether the content is secure or unsecure. Secure communication is used when the information is confidential or sensitive. Any content that is, or should be, kept private needs to be handled in a secure manner. This means:

1. It is rarely broadcast.
2. The choice of medium must be secure.
3. The handling of the information prior to and after delivery must be secure.

Often the security of a message is determined by:

1. Regulatory and legislative constraints, such as:
  - A. Family Educational Rights and Privacy Act (FERPA)
  - B. Health Insurance Portability and Accountability Act (HIPPA)
  - C. Family Medical Leave Act (FMLA)
2. Company policies, including:
  - A. Hiring information.
  - B. Trade secrets.
  - C. Competitive strategies.

3. Personal information, such as:
  - A. Identification information.
  - B. Gossip.
  - C. Information that could be incriminating.
  - D. Relationship issues.

It should be noted that secure information should not be broadcast unless the broadcast method is verified to be secure. An example is an automated email that includes a password. This broadcast is in response to a request in which identity is verified prior to the broadcast.

In all situations, it is of the utmost importance to consider the confidentiality of the content and what this implies as far as choosing communication methods. Depending on the situation, mishandling secure information could have very damaging consequences. In the business environment, these consequences may range from simple embarrassment to job loss.

# Exercise 12: Secure and Unsecure Communications

⌚ 5 to 10 minutes

---

Complete the following exercise about secure and unsecure communications.

1. Match each listed situation with all types of communication that apply. (Your answers may vary depending on the situation you have in mind. Discuss these answers with other students or your facilitator.)

A. Situation:

- i. A memo providing information about a person who is being laid off.
- ii. An email invitation to go to a ball game together after work.
- iii. A notice about hours of operations.
- iv. An update on a project.

B. Types of Communication:

- i. Face-to-face
- ii. Virtual
- iii. Synchronous
- iv. Asynchronous
- v. Broadcast
- vi. Exchange
- vii. Casual
- viii. Formal
- ix. Secure
- x. Unsecure

## Solution

---

1.
  - A. A memo providing information about a person who is being laid off.
    - i. Virtual
    - ii. Asynchronous
    - iii. Broadcast
    - iv. Formal
    - v. Secure
  - B. An email invitation to go to a ball game together after work.
    - i. Virtual
    - ii. Asynchronous
    - iii. Exchange
    - iv. Casual
    - v. Unsecure
  - C. A notice to customers about hours of operations.
    - i. Virtual
    - ii. Synchronous
    - iii. Broadcast
    - iv. Formal
    - v. Unsecure
  - D. An update on a project.
    - i. Virtual
    - ii. Synchronous
    - iii. Exchange
    - iv. Casual
    - v. Unsecure

## Conclusion

In this lesson, you have learned:

- About synchronous and asynchronous communications.

- The differences between secure and unsecure communications.
- To recognize broadcasts and exchanges.
- How to approach casual and formal communications.

Evaluation  
Copy



# LESSON 3

## Types of Media

---

### Topics Covered

- About the fundamentals of media.
- To relate the types of communication to:
  - A. Text.
  - B. Audio.
  - C. Graphics and imagery.
  - D. Haptics.
- About the value of combining media.

### Introduction

Evaluation  
Copy

## 3.1. The Fundamentals of Media

In the past, the media used for communication was limited.

1. Early history included oral communications.
2. Later, different forms of written communications were used.

With the advent of technology, methods of communicating at a distance have increased tremendously. Many virtual communication systems now combine different types of media.

In this lesson, we will learn about each type of media and how they can be integrated to enhance communication.

### ❖ 3.1.1. Media and Senses

Media is the plural of medium. A medium is a means of communication. In virtual communication, media are the methods used to deliver messages from one person to another person through the senses. The following are relationships between senses and media:

1. Sight: Text-based media, graphics, and imagery.
2. Sound: Audio-based media.
3. Touch: Haptics.

We will look at these in more detail in this lesson.

Two other senses include taste and smell. Because taste is a personal, internal sense, it is rarely used for communication between people. However, it can be; for example, a poison may be made to taste foul to communicate that it is not good for consumption.

Communicating through smell is used on occasion, though it certainly is not encountered as often as other sense-based communications. These are some common applications:

1. The foul odor added to natural gas communicates a dangerous situation.
2. Scratch and sniff labels inform customers about a product's attribute.
3. Vanilla-scented air fresheners communicate a homey, warm feeling.

So we can see that subtle communication can take place in surprising ways using sensual appeal.



# Exercise 13: The Fundamentals of Media

⌚ 5 to 7 minutes

---

Respond to the following questions about media.

1. Communication media deliver messages through the \_\_\_\_\_.
2. Which of the following is a haptic medium?
  - A. An email.
  - B. A scratch and sniff label.
  - C. An electronic vibration.
  - D. Music.

Evaluation Copy

## Solution

---

1. Communication mediums deliver messages through the **senses**.
2. C. An electronic vibration.

# Exercise 14: The Fundamentals of Media - Personal Application

🕒 10 to 15 minutes

---

Perform the following activity relating to Media and communication:

1. Recall a commercial or advertisement you recently viewed.
  - A. As you think about the senses that are being used, write down how they are being used to influence your decisions.
2. Think about a period of time when you were with other people. This could be at work, shopping, or at leisure.
  - A. What did you see, smell, hear, and physically feel?
  - B. Write down or discuss what messages were received by your senses?

\*

---

## 3.2. Communication and Media

There are four types of media that correlate to different methods of communicating. The media and communication methods are as follows:

1. Text-based media and words.
2. Audio-based media and voice.
3. Imagery and sight.
4. Haptics and touch.

### ❖ 3.2.1. Text-based Media

Text-based media are any media that supports written communication composed of any of the following:

1. Letters.
2. Words.
3. Numbers.
4. Symbols.

There are many communication systems that are text-based. Some are synchronous, assuming both parties are interacting with each other at the same time. These include:

1. Instant messaging.
2. Chat.

Other systems are asynchronous and assume the communicating parties are not interacting at the same time, so responses are not expected immediately. Asynchronous text-based communication includes:

1. Discussion forums.
2. Social networking.
3. Faxes.
4. Email.
5. Traditional “snail” mail.
6. Blogs.

It is feasible for a method of written communication to be either synchronous or asynchronous, depending on whether or not the two parties are active in the discussion at the same time. An example of this is texting.

### ❖ 3.2.2. Audio-based Media

Audio-based media includes anything that incorporates sound to deliver the message. Audio-based media began when the first recordings were made on wax rolls and played over a phonograph. As technology improved, applications expanded.

Audio-based media emulate the natural voice, and the voice is a primary form of communication in face-to-face interactions. People are naturally comfortable with audio communications.

As with text-based media, audio-based media can also be separated into synchronous and asynchronous communication. Examples of synchronous audio include:

1. Land line telephones.
2. Cell phone.
3. Internet (VOIP) phones.
4. Short-wave radio.
5. Audio conferencing.
6. Transportation dispatching.

These are examples of asynchronous audio-based communication systems:

1. Audio podcasts.
2. Radio broadcasts.
3. Internet radio.
4. Voicemail.

Again, these are examples of the media's primary use. Many audio-based media may be used either synchronously or asynchronously, for example:

1. A recorded call from a doctor or advertiser may be delivered over the phone.
2. A bus dispatcher may communicate with a driver, or simply announce information.

### ❖ 3.2.3. Graphics and Imagery

The use of visual media in communication is powerful. Many people process visual information more quickly than textual information or audible information.

The expression “A picture is worth a thousand words” has much truth to it. Visual imagery is used to enhance communication when words alone are too cumbersome to explain concepts that are either:

1. Simple.
2. Complex.

Simple images are often used to communicate simple concepts that would require many words to communicate. These images may be used alone or in combination with other media, and include:

1. Road signs.
2. Warning signs.
3. Computer icons.
4. International symbols.
5. Logos.

Images may also be used to communicate more complex concepts that are difficult to explain with words alone. These images are often combined with words, either in audible form or text form. The following are examples of complex concepts that are communicated through images:

1. Architectural designs.
2. Flowcharts.

3. Art.
4. Electrical or mechanical diagrams.
5. Product assembly instructions.

Technology has opened the door to animated visuals as well. In colleges and universities, educational simulations are commonly used in online science classes.

Images are often used in published media, including online media, such as:

1. Newspapers.
2. Magazines.
3. Books.
4. Handouts.
5. Promotional material.

Common image types that are used in these publications are:

1. Graphs.
2. Diagrams.
3. Pictures.

Evaluation  
Copy

More complex images, graphics, and animated images are often combined with audio-based media because the combination of the two can closely simulate face-to-face communication. Examples of these combined media include:

1. Movies.
2. Television.
3. Slide show presentations with voiceover.
4. Video podcasts.
5. Video conferencing.
6. Webcasts.

### ❖ 3.2.4. Haptics

Haptics are a very interesting communication media. Haptics relate to the tactile, or the sense of touch. Haptic communication began as a way to replace communication through the usual senses of sight and sound.

1. Braille has been in use since the 1800s for sight-impaired individuals.
2. Communicating through touch is common for those who are both hearing and sight impaired.

Technology has increased the use of haptics in communication; primarily in the form of vibration. Beginning with computer gaming, haptics have been used in:

1. Joysticks.
2. Flight simulator chairs.
3. Braille displays for the visually impaired.
4. Pagers.
5. Mobile device vibrators.

Mobile device vibrators, like those used in wireless phones, provide a way to receive information privately about incoming phone calls, timers, alarms, and more.

Another example of haptic communication is the paging device used at some restaurants. These devices are given to the customers when they check in. When a table is ready for a customer, the device vibrates.

Simple vibrating tactical signals can communicate a number of different messages by varying:

1. The length of the pulse.
2. The intensity of the pulse.
3. The number of pulses.

Haptic media are not commonly used in day-to-day interpersonal communications, but as we look to the future, tactile tools are likely to become more accessible for day-to-day virtual communications.



# Exercise 15: Communication and Media

⌚ 15 to 20 minutes

Respond to the following questions about communications and media.

1. True or False:
  - A. Immediate answers will be received through email.
  - B. Texting is the best way to communicate because it can be both synchronous and asynchronous.
  - C. Written language is composed of letters, numbers, and symbols.
  - D. Written communication is more private than other communication methods.
  - E. Immediate answers can be received through email.
  - F. Discussion forums are not a good way to communicate.
  
2. Which of the following is/are normally synchronous?
  - A. Audio podcasts.
  - B. Radio broadcasts.
  - C. Internet (VOIP) phones.
  - D. Internet radio.
  - E. Voicemail.
  
3. Which of the following are reasons people are comfortable with virtual audio communications?
  - A. It is easy to get instructions on how to use it.
  - B. It emulates the natural voice.
  - C. It has been around for a long time.
  - D. The voice is a primary form of communication in face-to-face interactions.
  - E. It is easier to use than text-based communications.
  
4. Imagery is often used:
  - A. In combination with other media.
  - B. To communicate with sight impaired individuals.
  - C. To explain complex processes.
  - D. In publications.
  
5. Imagery may be used to help communicate:

- A. Complex concepts.
- B. Warnings.
- C. Instructions.
- D. Simple concepts.
- E. All of the above.
- F. None of the above.

6. Fill in the blanks with the correct words:

- A. Haptics are a form of communication that uses the sense of \_\_\_\_\_.
- B. Mobile devices use Haptics in the form of \_\_\_\_\_ for private communication.
- C. Vibrations may communicate many things, depending on the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ of the pulses.
- D. Haptics are beneficial for communication with \_\_\_\_\_ impaired people.

## Solution

---

1. True or False:
  - A. False
  - B. False
  - C. True
  - D. False
  - E. True
  - F. False
2. C.
3. B. and D.
4. A, C, and D.
5. E.
6.
  - A. Haptics are a form of communication that uses the sense of **touch**.
  - B. Mobile devices use haptics in the form of **vibrations** for private communication.
  - C. Vibrations may communicate many things, depending on the **length, intensity, and number** of the pulses.
  - D. Haptics are beneficial for communication with **visually** impaired people.



### 3.3. Combined Media

As we learned in the first lesson, face-to-face communication is normally composed of three different forms of communication:

1. Words.
2. Voice.
3. Body language.

Words and voice are received by one sense, hearing. Most face-to-face communication uses two senses, sight and hearing. Other senses, like touch, may be combined to enhance the message or emphasize concepts.

In the same way, mediated communication works best when it combines different types of media, called “multimedia.” Appealing to multiple senses is beneficial because:

1. Each person receives sensory information differently, so the use of multimedia makes the message more accessible to a larger audience.
2. The message is strengthened through redundancy.
3. If one form of media experiences interference, the other form may carry the missing information.

Multimedia may be any combination of media types. The most commonly used combinations are:

1. Text and visuals.
2. Spoken words and visuals.
3. Imagery and sound.

Visual and word-based (audio or text) communications are very powerful in virtual communications because they use the most dominant communication senses of sight and sound, and they are easily emulated through technology. Notice how many of the following examples of multimedia systems use combined visual and word-based media:

Synchronous systems:

1. Web conferencing - imagery and sound.
2. Chats that allow embedded images or attachments - imagery and text.
3. Video conferencing - imagery and sound.
4. Closed circuit television - imagery and sound.
5. Texting - images and text.

Asynchronous systems:

1. Flight and driving simulations - imagery, sound, and haptics.
2. Music videos. - imagery and sound.
3. Podcasts - imagery and sound.
4. Social networking - imagery and text.
5. Television and movies - imagery and sound.
6. Books with images - imagery and text.
7. Pop-up messages and alarms - text, sound, and possibly haptics.

8. Embedded images or videos in forums or on blog sites - imagery and text.



## Exercise 16: Combined Media

 35 to 5 minutes

---

Answer the following question about combined media:

1. Which of the following is/are false?
  - A. Visual media are powerful in virtual communications because they use sight, which is a dominant sense.
  - B. Podcasts use haptics.
  - C. Word-based communication is easily emulated through technology.
  - D. Redundancy strengthens communication.
  - E. Multimedia appeals to multiple senses.

## Solution

---

1. B. Podcasts use haptics.

**Evaluation  
Copy**

# Exercise 17: Combined Media - Personal Application

🕒 5 to 7 minutes

---

1. Imagine a situation in which you are meeting in an office with three members of your staff. You wish to describe a new product the staff members have never seen before.
  - A. In what ways can you describe the product?
  - B. How many forms of communication might you use?
  - C. What would be the benefit of using multiple communication methods?
  
2. Now imagine the same situation, but you and the staff members are all at different locations, communicating virtually.
  - A. In what ways can you describe the product?
  - B. How many forms of communication might you use?
  - C. What would be the benefit of using multiple virtual communication methods?

## Conclusion

In this lesson, you have learned:

- About the fundamentals of media.
- To relate the types of communication to:
  1. Text.
  2. Audio.
  3. Graphics and imagery.
  4. Haptics.
- About the value of combining media.



# LESSON 4

## Selection Criteria

---

### Topics Covered

- How to assess the audience.
- How to assess the message.
- About technical considerations.
- How to select the most appropriate media for a given situation.

### Introduction



#### 4.1. Assessing the Audience

When communicating virtually, it is often more difficult to “read” the other person than when communicating face-to-face. This is because:

1. Body language may be missing from the conversation.
2. Vocal cues may not be heard.
3. Transmissions may cause delays making it more challenging to respond with the normal timing.

The lack of nonverbal feedback and the change in timing can cause messages to be misinterpreted. Additionally, the person’s comfort level with the communication media may affect their attitude toward the topic of the conversation.

These issues can be minimized if we understand the other person’s communication style and relationship with communication media. It can be useful to consider the following questions before communicating with others virtually:

1. What is the natural mode of communication for the recipient?
2. What media is easiest and most comfortable to use for the recipient?
3. Which media is available to the recipient?

4. How many participants are involved in the conversation?

### ❖ 4.1.1. Natural Communication Mode

We can usually determine the types of media a person will be most receptive to by observing how he or she chooses to communicate with others in both virtual and face-to-face interactions. Does he or she:

1. Describe things well orally or in writing, or does he or she struggle with verbal descriptions?
2. Prefer to write emails or talk on the phone?
3. Follow instructions better when they are explained verbally or when they are written down?
4. Draw pictures or diagrams or build models to express ideas?

Virtual communication will be most effective when you use media that emphasizes forms of communication that match the receiver's natural communication style.

### ❖ 4.1.2. Receiver Capabilities

It is reasonable to expect an employee to know how to use certain mediated communication systems, particularly if those systems are commonly used within the company. However, new employees and people outside the company may not have those skills.

Assuming technical skills exist may create a barrier to communication. Technologies that are new to a person may:

1. Take time to learn.
2. Take time to navigate.
3. Cause frustration.
4. Distract from the message.

Erroneous assumptions can be seen in the following common business examples:

1. Office staff assuming floor personnel use email regularly enough to be proficient with it.
2. Assuming an executive, who relies on an administrative assistant to manage communications, will be able to use personal conferencing equipment easily.
3. Providing customer service through video conferencing without available technical support.

If the immediate desire is to accurately communicate a message and have that message well received and understood, technical competencies should be confirmed, not assumed, prior to communication.

### ❖ 4.1.3. Access and Availability

Two common errors that take place when new technologies are emerging are:

1. Assuming those technologies are available in all environments.
2. Assuming other people use those technologies.

One should always keep these things in mind:

1. Geographical conditions may affect the availability of media.
2. Political influences may affect the availability and affordability of media.
3. Less developed regions often lag behind in systems that are well established in more progressive or more populated regions.
4. Regulations, such as those in hospitals, may restrict the use of some communication devices.
5. Certain structures and materials, such as buildings and walls, may interfere with transmissions.
6. Inclement weather may affect line-of-site transmissions.
7. The recipient may not have a particular mobile device or subscribe to a particular service.

Just as one should verify the other person's media capabilities, one should also consider the technology that is available to that person.

### ❖ 4.1.4. Number of Participants

The number of participants in a conversation is yet another consideration. Most forms of media work equally well when used for conversations:

1. Between two people.
2. Between larger groups of people.

However, some forms of media do not work as well with large groups, particularly if the conversation is interactive. For example:

1. Chat rooms become very confusing when there many participants because:
  - A. Messages can be missed.
  - B. Slower typists can fall behind in the conversation.
  - C. Multiple conversations may take place at the same time.

2. Texting works well for broadcasts to large groups, but responses to the initial text will not include all recipients, thus prohibiting interaction.

Some technologies require modifications to be suitable for larger parties. For example, telephony, designed to be a two-party medium, requires additional layers of hardware or software to manage more than two connection points or participants. These additions include:

1. Physical teleconferencing equipment that allows more than two connections.
2. Software solutions (not always visible to the user) that permit multiple connections.
3. Physically embedded speakers and microphones that allow more than one person to participate in a conversation at one site.

While these additional layers of technology may be well established, one cannot assume they are readily available to all participants, so it is important to verify that they are available to all participants prior to attempting communication.

## Exercise 18: Assessing the Audience

 7 to 10 minutes

---

Respond to the following questions about people.

1. Which of the following are considerations when selecting media?
  - A. The media that is available to the other person.
  - B. The natural mode of communication for the other person.
  - C. The other person's demographics.
  - D. The other person's geographic location.
  - E. The media the other person is comfortable with.
  
2. True or false:
  - A. New technologies may distract from a message.
  - B. There are some technologies that are available everywhere because they have been around for so long.
  - C. By now, everyone should be able to use email.
  - D. Some people are not skilled enough to navigate a simple website.
  - E. Technical challenges distract from the message.
  
3. Which of the following factors does not affect the accessibility of communication media?
  - A. Politics.
  - B. Walls.
  - C. Weather.
  - D. Skill level.

## Solution

---

1. A, C, D, and E.
2. A. True  
B. False  
C. False  
D. True  
E. True
3. D.



## 4.2. Assessing the Message

Once you have a solid understanding of the audience, you should analyze the message to determine what media is best for the delivery of the message. Considerations include:

1. Length.
2. Complexity.
3. Interactivity.
4. Privacy.
5. Urgency.

Evaluation  
Copy

### ❖ 4.2.1. Message Length

The length of a message influences the appropriateness of a medium. Many technologies are suitable for short messages, and limit message length. Media that limit the length of messages include:

1. Micro blogging systems with character limitations.
2. Website contact forms with character restrictions.
3. Voicemail systems.
4. Comment boxes.
5. Texting.

Most media geared toward shorter messages are asynchronous, and often only intended for one-way communication.

Media that support longer messages may be preferred for the following types of messages:

1. Formal communications in which abbreviations may be discouraged.
2. Messages with crucial details that could be missed easily in a small-capacity system.
3. Interactive communications in which message length is variable.

## ❖ 4.2.2. Message Complexity

Messages that are complex or critical often require more sophisticated media. They may require media that has the following capabilities:

1. Visuals, such as:
  - A. Graphics.
  - B. Images.
  - C. Animation.
  - D. Video.
  - E. Diagrams.
2. Audio, including:
  - A. Voice.
  - B. Music.
  - C. Sound effects.
3. Multimedia, such as:
  - A. Presentations and voice.
  - B. Video and audio.
  - C. Haptics and audio.
4. Reliable delivery. This may include:
  - A. A system that provides notification that the message has been delivered.
  - B. Email, which has a greater probability of being delivered than a text message.
  - C. Synchronous communication systems that permit immediate feedback from the recipient.

Evaluation  
Copy

### ❖ 4.2.3. Interactivity

Many communications involve interactive participation, such as that which takes place in:

1. Business meetings.
2. Brainstorming sessions.
3. Training events.
4. Sales presentations.

In these situations, the preferred media will provide:

1. An easy interface to support novice users.
2. Multimedia to support the different communication needs of the participants.
3. Technical support for synchronous communications to insure the communication flows well and attention is not diverted by technical difficulties.

Interactivity may be synchronous or asynchronous. Synchronous media may be preferred when:

1. There are time constraints.
2. The participants need or want a “human” connection.
3. Messages may be easily misunderstood and need to be corrected right away.

Asynchronous media, such as discussion forums, are preferred in some situations because they:

1. Allow participants to think through thoughts fully before sharing.
2. Allow quiet people the opportunity to speak out.
3. Prevent aggressive speakers from dominating the conversation.

Regardless of whether the communication is synchronous or asynchronous, any medium that excludes video and voice can:

1. Eliminate societal biases based on race, sex, stature, etc.
2. Eliminate nonverbal messages.

### ❖ 4.2.4. Privacy and Security Considerations

A message that is confidential should not be sent through a nonsecure media without prior consent. These messages may include:

1. Bank and financial communications.
2. Hiring, firing, and discipline issues.
3. Information controlled under regulations such as:
  - A. Family Educational Rights and Privacy Act (FERPA)
  - B. Health Insurance Portability and Accountability Act (HIPPA)
  - C. Americans with Disabilities Act (ADA)
  - D. Family Medical Leave Act (FMLA)
4. Trade secrets.
5. Relationship issues.

If there is any concern about the possibility of communications being intercepted through media, the parties should discuss the matter and agree on a method that makes sense to each of them.

The most secure systems usually include some form of access identification. Examples include:

1. Internal email systems.
2. Password-protected conferencing systems.
3. Peer-to-peer file sharing systems.
4. Websites that require accounts secured by passwords.

On websites, a secure site can be determined by a URL that includes “HTTPS,” rather than “HTTP.”

#### ❖ 4.2.5. Urgency

Finally, the urgency of a message must be considered. Synchronous communication should take place if a message:

1. Needs to be delivered right away.
2. Requires an immediate response.
3. Must be interpreted very accurately.

Should the only media available be asynchronous:

1. The person delivering the message should specifically request immediate feedback.
2. Continued prompting for feedback may be required.

3. One might consider sending the message through multiple communication channels to insure the message has been received.

Evaluation  
copy

# Exercise 19: Assessing the Message

 7 to 10 minutes

---

Answer the following questions about assessing messages.

1. Which of the following is most appropriate?
  - A. Essays sent through micro blogging systems.
  - B. Conflict resolution through texting.
  - C. Requesting information through a website form.
  - D. Explaining mathematical concepts through voicemail.
  
2. Which of the following is most beneficial when holding a brainstorming session with a group of people in different locations?
  - A. Broadcast capability.
  - B. Multimedia.
  - C. Haptics.
  - D. Privacy.
  
3. True or false?
  - A. Interactivity may be synchronous.
  - B. Asynchronous media should be avoided.
  - C. Synchronous communication is best for quiet people.
  - D. Dominant participants speak for everyone.
  - E. Asynchronous discussion forums minimize biases.
  
4. Which of the following are true?
  - A. Synchronous communication is generally preferred for urgent messages.
  - B. Feedback takes too much time for urgent messages.
  - C. It is illegal to send some types of business messages through email.
  - D. Personal information should be delivered through secured systems.
  - E. HIPPA, FERPA, ADA, and FMLA are government guidelines for good communication.

Evaluation  
Copy

## Solution

---

1. C.
2. B.
3.
  - A. True.
  - B. False.
  - C. False.
  - D. False.
  - E. True.
4. A and D.

**Evaluation  
Copy**



## 4.3. Technical Considerations

### ❖ 4.3.1. Mediated Systems

The following table lists different types of media and their strengths and weaknesses. While studying this list, think about what was discussed about the people and the message in the previous units of this lesson.

Evaluation  
Copy

<b>Media Type</b>	<b>Strengths</b>	<b>Weaknesses</b>
Personal video conferencing (video and audio exchange), e.g., Skype.	May be low or no cost. Simulates face-to-face conversations.	Connectivity may be an issue due to large bandwidth usage. May have a moderate learning curve.
Personal web conferencing (presentations and audio exchange, may include video), e.g., WebEx; GoToMeeting.	Simulates face-to-face conversations. May allow sharing of documents and other media through desktop sharing.	Connectivity may be an issue due to large bandwidth usage. May require special technical support. May have a steep learning curve. May be expensive.
Group video conferencing (video and audio), e.g., larger Polycom systems.	Simulates face-to-face conversations. May allows sharing of documents and other media.	Connectivity may be an issue due to large bandwidth usage. May be expensive. May require highly specialized equipment. May require special technical support. May have a steep learning curve.
Communication-centered applications (learning management systems, content management systems, online forums), e.g., Blackboard, Drupal.	Often supports multimedia sharing: voice, text, and visuals. Provides document sharing. Usually asynchronous, but may have synchronous components; typically chat and video conferencing.	May be very expensive. May require technical knowledge to install and support. May have moderate to steep learning curve.
Telephone (voice only).	Fast. Easy. Relatively inexpensive. Provides immediate feedback.	May or may not be private. May or may not be secure.
Mobile devices (smart phones, tablets), e.g., iPhone, Android.	Multiple ways to communicate (phone, text, video). Easy to carry and portable. Moderate price. Tools can be synchronous or asynchronous.	May or may not be private. May or may not be secure. Graphics can be slow. Connectivity may be an issue in remote locations.
VOIP (Internet phone), e.g., MagicJack.	Fast. Easy. Low or no cost. Provides immediate feedback.	Connection may be more prone to interference than phone.
Chat.	Fast. Easy. Provides immediate feedback.	Often requires Java installation. In group communications, there can be many conversations taking place at the same time. May be hard to follow. May require fast typing skills to keep up.
Email.	Fast. Easy. Proven technology. Allows media attachments.	Message can be sent to the wrong person. Easily hacked.

<b>Media Type</b>	<b>Strengths</b>	<b>Weaknesses</b>
Texting.	Fast. Easy. Good for short messages. May allow image and video attachments.	Not good for long messages. Not secure. Easily hacked. Message can be sent to the wrong person.
Fax.	Relatively fast. Great for sending documents.	Requires phone line. Images may be poor quality. Requires receiving fax machine or software.
Discussion forums.	Great for deep discussion and brainstorming. Good for mid-sized groups. May allow image attachments.	May have slow responses.
Heuristic systems (exploratory systems, querying systems, demonstrations and online activities.), e.g., Wikipedia, some websites, interactive java applets, etc.	Great learning tools. Permits free-form exploration and learning.	Time consuming to create. May require significant bandwidth.
Animation, e.g., virtual calculators, animated graphs, some e-cards, etc.	Good explanatory tools. Provides real-life simulation. May support interaction.	May require significant bandwidth. Limited to computerized technology (computers, laptops, tablets, smart phones).
Websites and blogs.	Accessible 24x7. Large quantities of information. Can include multimedia. Can be used in conjunction with feeds for automated updates.	Can be challenging to create. Most communication is one-way.
Interactive web media. (Social networking), e.g., Facebook, LinkedIn.	Fast. Supports multiple communication types (microblogging, blogging, chat, email). Often free. Accessible 24x7. Can include multimedia. Good for short broadcasts or quick conversations.	Lacks privacy. May have steep learning curve. Functions change randomly. Many ads. Often contains a good deal of superfluous information. Not favorable for formal communications.
Microblogging, e.g., Twitter.	Best for short broadcasts. Easy to access. Fast.	Interactive discussions are rather awkward compared to other technologies. Security/privacy is limited.

### ❖ 4.3.2. Underlying Transmission

For some communications, the underlying media may need to be considered because it may affect the quality or reliability of the message. The following lists includes some of the transmission methods, and their strengths and weaknesses:

Media Type	Strengths	Weaknesses
Hard-wired electronics (uses electronic pulses).	Dependable. Fast.	Requires cabling. Not mobile.
Fiber optics (uses light pulses).	Very fast. Dependable.	Requires cabling. Less available than electronic wiring. Not mobile.
Wireless radio waves (microwaves, satellite).	Allows mobility over large areas.	Can be affected by weather and the environment. Less secure unless encrypted.
Wireless radio waves (Wi-Fi, Bluetooth).	Allows mobility. Can be fast. Best for short broadcasts. Easy to access.	Connection is not secure unless encrypted. Connection has a relatively short range.

Two example situations in which transmission would be considered are:

1. An important sales meeting that requires a reliable connection and uses both audio and video, thus requiring a lot of bandwidth. In this case, hard-wired networking is likely to be the best choice.
2. A staff member who travels from location to location. Wireless communications may be the best option in this scenario.

### ❖ 4.3.3. Multimedia

As was learned in the first lesson of this class, face-to-face communication normally combines three different forms of communication:

1. Words.
2. Voice.
3. Body Language.

Because words and voice are received by one sense (hearing), most face-to-face communication uses two senses. In the same way, the most common uses of multimedia combine two senses:

1. Text with visuals

2. Spoken words with visuals.

It has been shown that:

1. Combining two media types enhances the reception and understanding of messages.
2. Combining three or more media types decreases understanding.

The reason for this is sensory overload. Most people can only process two sensory inputs at a time. Concentration decreases when the senses have to process too much.

Other senses may be introduced at times to enhance the message or emphasize concepts. Like an occasional physical touch in face-to-face communications, a third media may be introduced into virtual communications, but it should be used cautiously and intentionally.

#### ❖ 4.3.4. Layering Media

If we want to use multiple media types (e.g., audio and visuals) we may need to layer technologies. Layering simply means to use multiple mediated systems concurrently.

Layered technologies can be beneficial:

1. As a backup in case all or part of the primary system fails.
2. When used to combine the same features available in expensive systems without paying a premium price.
3. When used to enhance communications and more closely emulate face-to-face communication.

Let us look at some examples of layered technologies in different situations:

1. The audio fails in a web conferencing system, so the facilitator connects all users through a VOIP conferencing system, such as Skype, while continuing with the visual presentation in the web conferencing system.
2. The presenter is showing his or her desktop with a screen sharing program, and wants to show an activity or paper document. The presenter uses his or her web camera to record the document or activity, which is displayed on the local desktop, and thus is visible to the participants.
3. The participants wish to share a whiteboard application that is run on a local machine. Using an application sharing program, control is passed from one person to another, giving each the ability to work on the whiteboard application.

One drawback to layering technologies is the heavy use of system resources. When multiple media systems are running concurrently, transmission quality may decrease due to the demand on processing power and bandwidth.

If at all possible, thoroughly test systems in advance prior to using them in production, particularly with clients and executives.

## Exercise 20: Technical Considerations

 7 to 10 minutes

---

Respond to the following true/false questions about the mediated technology:

1. Multimedia allows us to use many different kinds of media so we can appeal to every person's style.
2. We layer media because it works better than expensive systems.
3. It's wise to include layered media as part of a backup plan just in case technology fails.
4. Multimedia has its greatest impact when two media types are used together.
5. Social networking is the best mediated communication because it appeals to so many people, has so many features, and it can be free.
6. Even in a hard-wired network, transmission to a branch office may be affected by a storm.
7. Microblogging works well for fast-paced business meetings with a client.

## Solution

---

1. False.
2. False.
3. True.
4. True.
5. False.
6. True.
7. False.

**Evaluation  
Copy**

# Exercise 21: Technical Considerations - Personal Application

⌚ 7 to 10 minutes

---

Answer the following questions about communication technology.

1. Recall a time when you were in a virtual business meeting or conversation and the communication was interrupted by dropped signals or poor, choppy, or digitized transmissions.
  - A. What was the cause of the problem?
  - B. Was the issue within your control or not?
  - C. What did you do about it?
  - D. What else could have been done about it?
  - E. What might have been a better medium to use?

\*

---

## 4.4. Selecting Media

Evaluation Copy

When selecting communication media, the application for which the media will be used should be a strong influencing factor. For example:

1. Teaching works well with interactive and heuristic systems.
2. Broadcasts may be best delivered through short, fast systems.
3. Some questions or private information are best delivered through secure systems.
4. Brainstorming may need a system that allows many connections.

The media selection process combines all the factors in this lesson. The following reiterate the variables one considers when selecting media:

1. Who is the recipient?
2. Does he or she prefer to communicate verbally, visually, or audibly?
3. Is he or she experienced with mediated communications?
4. Are there one or many participants?
5. What types of messages are being sent?

6. Is the message short or long?
7. Is the content private?
8. Does the communication have a time constraint?
9. What are the needs of the communication process?
10. Is multimedia needed to facilitate understanding?
11. Is the reliability and quality of the transmission important?

In most situations, the availability of media will be the most limiting factor in the selection process. The confidentiality of the message may limit the media selection further.

## Exercise 22: Selecting Media

🕒 5 to 7 minutes

---

Match the following communication needs with the best mediated systems.

1. Communication Needs

- A. Broadcasting information about a company picnic.
- B. Setting a time for a meeting with a director.
- C. Returning a white paper that was just reviewed.
- D. Publishing a weekly newsletter.
- E. Completing a job performance review.

2. Mediated System

- A. Email.
- B. Text.
- C. Phone.
- D. Intranet.
- E. Personal web conferencing system.

## Solution

---

1. A. B.  
B. C.  
C. A.  
D. D.  
E. E.

**Evaluation  
Copy**

# Exercise 23: Selecting Media - Personal Application

 20 to 25 minutes

---

Write down your answers to the following questions.

1. List three different virtual communication scenarios that you encounter at your work. For each event:
  - A. Describe the participants.
  - B. Describe the message and/or communication that takes place in the event.
  - C. List the optimal technical needs required to enhance the communication process.
  - D. List the technologies that you know are available to you and the other participants.
2. Now plan how you would run the event if you were able to make the decisions.
  - A. What media would you use to coordinate the event (sending out invitations, agendas, etc.)?
  - B. What media would you use for the event itself and why?

## Conclusion

In this lesson, you have learned:

- How to assess the audience.
- How to assess the message.
- About technical considerations.
- How to select the most appropriate media for a given situation.



# LESSON 5

## Media Issues

---

### Topics Covered

- How to overcome issues, including:
  - A. Transmission issues.
  - B. Compatibility issues.
- How to resolve and prevent problems with:
  - A. Backups.
  - B. Malware protection.
  - C. A backup plan.

### Introduction

Understanding communication and selecting the right media for a specific conversation are only two of the issues that a manager needs to address when communicating virtually. When communicating using any form of mediated communication, there's a likelihood that technical problems will take place. Let's look at some of these issues and how to overcome them.



## 5.1. Overcoming Transmission Issues

Transmission issues include anything that interferes with the sending or receiving of messages. The primary causes of transmission problems include:

1. The inability to make a connection.
2. Low bandwidth.
3. Interference.

### ❖ 5.1.1. Making a Connection

In many situations, the inability to make a connection is due to things outside of our control, such as:

1. Broken lines.
2. Weather.
3. Server issues.

These issues require contact with the providers and patience. If service will not be restored soon, reschedule the communications or select an alternative method.

There are things within our control that can be addressed immediately. They include:

1. An incorrect email address.
2. A wrong phone number.
3. A typo in the website URL.
4. A wrong login or password.

Double check all entered data and make certain it is correct. Then try connecting or resending again.

Some connection issues are caused by cached web pages. This problem can be rectified by going to the browser's tool menu and emptying the cache.

When a connection problem is with an email, you will get a "mail daemon," which is a return message letting you know that the email did not go through. Read the daemon carefully, because it will tell you why the message failed. The most common reasons include:

1. The email address does not have a mailbox. (The email address is probably typed incorrectly.)
2. The mailbox is full. (The other person needs to clean out old emails.)
3. The message is too large. In this situation you may:
  - A. Split the images between multiple emails.
  - B. Reduce the size of the attachments.
  - C. Use an alternative method for delivering documents, such as a web-based file sharing program.

## ❖ 5.1.2. Bandwidth and Interference Issues

Once a connection has been made, you may experience issues with the quality of the connection. The problem may be with a local machine or device, with the server, or with the network.

Bandwidth issues or interference are recognized by:

1. Silence.

2. Twanging sounds.
3. Static.
4. Choppy audio or video.
5. Frozen presentations.
6. Dropped signals.

When these things occur:

1. Close all other applications.
2. Lower the video quality to reduce drain on resources.
3. Use audio only and shut down video.
4. Move to another location with a stronger signal.
5. Restart the meeting or conversation and reconnect.

If the issue continues and you are unable to resolve the problem, you may choose to postpone the meeting or conversation. Another option might be to switch to an alternative communication method.

Some issues may be caused by the web browser or the browser's plugins. Plug-ins are add-on applications that provide greater functionality. When experiencing communication issues while using web-based applications:

1. Close all other programs.
2. Try different browsers.
3. Update Java and other browser plug-ins.

# Exercise 24: Overcoming Transmission Issues

 5 to 10 minutes

---

Respond to the following questions about transmission issues.

1. True or false:
  - A. Some things are out of our control.
  - B. Connection issues are commonly caused by typos.
  - C. Twangy sounds means there is no connection.
  - D. Separating images into multiple messages resolves interference issues.
  - E. When experiencing problems in a web-based system, one should close all other applications.
  
2. Which of the following messages are common when an email is not delivered?
  - A. The email address does not have a mailbox.
  - B. There is no recipient.
  - C. The mailbox is full.
  - D. The message is misspelled.
  - E. The message is too large.



## Solution

---

1.     A. True  
       B. True  
       C. False  
       D. False  
       E. True
  
2.     A., C., and E.



## 5.2. Overcoming Compatibility Issues

When working with staff members through electronic means, all parties must be able to access the same information. Sometimes, however, the information cannot be accessed due to incompatibility issues. Incompatibility may be due to file formats or hardware.

### ❖ 5.2.1. File Formats

The most obvious incompatibility issue takes place when participants are using competing software, or different versions of the same software. The software may perform the same general function, but may not use the same file formats or protocols. Examples of competing software include:

1.     Microsoft's Office Suite and Lotus SmartSuite.
2.     Skype and Apple's FaceTime.
3.     iMac and PC computers.
4.     Apple iPhones and Android smart phones.
5.     Kindle and Nook readers.

In some cases, developers have provided bridges that overcome compatibility issues. For examples, Microsoft Word and Lotus Word Pro permit users to save files to mutual file formats, including PDF and RTF.

### ❖ 5.2.2. Version Issues

Version incompatibility happens when:

1. An application no longer supports older file formats.
2. An application is too old to support newer file formats.

Backward compatibility issues, or the inability to read older file formats, are rare because most applications support older file formats. An example of this is Microsoft Word. The newer versions of Word create files with the extension .docx. This newer version of Word can read the older .doc files, but older versions of Word cannot read the newer .docx files.

### ❖ 5.2.3. Hardware

Older hardware may not be able to handle the resource requirements of newer software. Many newer applications, particularly those that use video or high-resolution images, can overwhelm old systems.

### ❖ 5.2.4. Overcoming and Preventing Problems

Should a staff member not be able to read a document due to software or version incompatibilities:

1. Save the document to an older version using the Save As feature.
2. Have your staff member download a “viewer” that will allow him or her to read the document.
3. Find an alternate format for the document. For example:
  - A. A word processing document may be saved as:
    - i. A PDF file, which can be read with Acrobat Reader.
    - ii. An RTF file, which can be read by most word processing applications.
  - B. An Excel spreadsheet can be exported to a comma-delimited or tab-delimited file and imported into another spreadsheet program.
  - C. A JPG file or other image file may be converted from one file format to another using a downloadable converter.
4. Use an open source version of an application; for example, two free, open source office suites that communicate with Microsoft Office are:
  - A. Open Office for PCs.
  - B. Neo Office for Macs.

In situations in which older hardware, such as a computer or device, cannot perform the desired function:

1. Eliminate non-essential media.

2. Reduce resolutions of documents, images and videos.
3. Find alternative communication media for resource-heavy objects.

Proactive planning can prevent problems. When preparing to communicate with others:

1. Find out what software the participants are using and plan documents accordingly.
2. Choose the “lowest common denominator” solution; the solution that works with the oldest technology.

# Exercise 25: Overcoming Compatibility Issues

⌚ 5 to 10 minutes

---

Fill in the missing words in the following sentences.

1. When working with older software versions, you may experience problems with \_\_\_\_\_.
2. A downloaded \_\_\_\_\_ lets a person read a document.
3. Two alternative document file formats that provide easier sharing are \_\_\_\_\_ and \_\_\_\_\_.
4. When working with varying levels of technology, choose the \_\_\_\_\_ solution.

## Solution

---

1. When working with older software versions, you may experience problems with **backward compatibility**.
2. A downloaded **viewer** lets a person read a document.
3. Two alternative file formats that provide easier sharing are **PDF** and **RTF**.
4. When working with varying levels of technology, choose the **lowest common denominator** solution.

# Exercise 26: Transmission and Compatibility Issues - Personal Application

 15 to 20 minutes

Respond to the following questions about transmission and compatibility issues as they relate to your work team.

1. Do all of your staff have access to the same level of technology? If not,:
  - A. Does it present a problem?
  - B. What can you do proactively to avoid the problem?
  - C. What is your “Plan B”?
  
2. Sometimes the only difference in technology among remote workers is the quality of connectivity. Do you have varying connectivity issues within your team?
  - A. Does it present a problem?
  - B. What can you do proactively to avoid problems?
  - C. What is your “Plan B”?
  
3. Think of a time when you experienced compatibility issues.
  - A. How was it resolved?
  - B. Knowing what you know now, list any other options you might have had.



## 5.3. Backups

Backups provide a copy of a system, program, or data so that, should anything happen, the system can be restored with minimal loss. Managers and staff should protect their data so that the company does not lose valuable information or time reconstructing work.

Backups protect a person from consequences related to:

1. Corrupted files.
2. Files that are accidentally deleted.
3. Dying computer hard drives.

4. Data that has become inaccessible.
5. Phones, tablets, and laptops that are lost, stolen, or broken.

There are different types of backups. They include:

1. Full system backups that include everything on the hard drive.
2. Partial backups that include only that data that changed since the previous backup.
3. Data backups that include only data of a specified type or in specified locations.

Backups can be performed on any storage device, including

1. Servers.
2. Workstations.
3. Thumb drives.
4. Phones.

Backups should be kept in locations that are accessible. Many backups are kept on:

1. Company backup servers.
2. Portable hard drives.
3. “Cloud” servers.
4. Peripherals and portable media, such as thumb drives.
5. Peer-to-peer data sharing systems.

Peer-to-peer systems store copies of shared data on multiple workstations. If one computer loses the data, it can be retrieved upon connection with a team computer.

The choice of backup types and backup locations may be dictated by company IT policies. Regardless, mobile employees should have systems in place for backing up their data often, and have easy and quick access to the backed up data.

## Exercise 27: Backups

 5 to 10 minutes

---

Respond to the following questions about backups.

1. What are the different types of backups?
2. Which of the following are not true about backups:
  - A. They can be stored in many locations.
  - B. They might be stored on other people's workstations.
  - C. They are only needed if the data is confidential.
  - D. They protect us from lost, deleted, and corrupted files.
  - E. Mobile devices are harder to backup.

## Solution

---

1. The different types of backups are:
  - A. Full system backups, which include everything on the computer.
  - B. Partial backups, in which only those things that changed since the previous full backup are backed up.
  - C. Data backups, which back up only data of a specified type or in specified locations.
2. C. and E.



## 5.4. Malware Protection

Malware is short for “malicious software.” Malware is any uninvited software that behaves negatively on one’s computer or device.

When communicating with staff, many opportunities present themselves for the introduction and spread of malware. A malware infection can cause major damage to company data and a loss of valuable time. The following are common ways that malware is spread:

1. Opening shared files.
2. Downloading software.
3. Accessing websites.

Depending on the type of malware, the following may happen:

1. Files may be corrupted.
2. Information may be deleted off hard drives.
3. Unwanted programs may run in the background.
4. One’s identity may be stolen.
5. One’s privacy may be invaded.

Malware may present itself in different ways. It may be malicious and damaging, it may be a simple prank, or it may even be inappropriate marketing. Some malware is simply the misuse of beneficial programs. The following is a list of common malware:

1. Infectious malware:

- A. Viruses are executable programs attached to files.
  - B. Worms are self-spreading executable programs.
2. Concealed malware:
- A. Rootkits insure the malware stays on the system undetected.
  - B. Backdoor malware bypasses authentication.
  - C. Trojan horses are often used for marketing, and usually affect the web browser. They pose as something attractive to lure a person to open them.
3. Profit seeking threats:
- A. Spyware steals information about the user.
  - B. Adware is integrated with software and contains ads. Adware may also include spyware.
  - C. Bots perform automatic activity over the Internet.
    - i. Good bots include the Captcha applications that protect systems from spammers.
    - ii. Bad bots include email address harvesters.
  - D. Cookies are used to remember authentication and for web personalization, but:
    - i. Tracking cookies track browser activity.
    - ii. Poorly managed cookies may provide opportunities for hackers to intercept information.

### ❖ 5.4.1. Protection

There are many applications available to clean systems of malware and to protect systems from infection. Every computer should be protected with:

1. Virus protection.
2. Adware and malware protection.
3. Firewall protection.

These systems are comprised of two parts:

1. The engine.
2. The database.

The engine is the program itself. It scans the computer, stores settings, and schedules scans. Database updates include information about the newest viruses. New malware is written regularly, so database updates are provided frequently.

To properly protect a system, the database should be updated before every scan, and the system should be scanned regularly.

# Exercise 28: Malware Protection

 5 to 10 minutes

---

Match the following terms with their definitions.

1. Terms:

- A. Tracking cookies.
- B. Rootkits.
- C. Worms.
- D. Trojan.
- E. Adware.
- F. Viruses
- G. Spyware.
- H. Backdoor malware.
- I. Bots.

*Evaluation  
Copy*

2. Definitions:

- A. Malware that steals information about the user.
- B. Executable programs attached to files.
- C. Software that insures the malware stays on the system undetected.
- D. Malware that poses as something attractive to lure a person to open it.
- E. Integrated with software, possibly spyware, and contains ads.
- F. Malware that is able to bypass authentication.
- G. Track browser activity and may provide opportunities for hackers to intercept information.
- H. Self-spreading executable programs.
- I. Perform automatic activity over the Internet.

## Solution

---

1. A. G.
- B. C.
- C. H.
- D. D.
- E. E.
- F. B.
- G. A.
- H. F.
- I. I.

**Evaluation  
Copy**

# Exercise 29: Backups and Malware Protection - Personal Application

 10 to 15 minutes

---

Respond to the following relating to backups and malware protection.

1. Do you know what type of virus and malware protection you have on your computer?
2. Is all your staff equally protected?
3. If your company uses mobile devices, are they protected?
4. How often are your systems scanned?
5. If you do not know the answers to any of these questions, how will you find out?
6. Take some time to write down a plan to insure all computers and mobile devices are protected. Be sure to communicate this plan to your staff.



## 5.5. Creating a “Plan B”

Evaluation Copy

After making certain all systems are protected with backup systems and malware scanners, the most important thing a manager can do to prevent problems with virtual communication is to have a “Plan B.” A “Plan B” is a backup plan should the primary method of communication fail.

When relying on technology, it is wise to plan an alternate means of communication should something go awry. The following are common backup plans for various communication systems:

1. If Wi-Fi Internet connectivity is disrupted, a phone with a data plan may be used,
2. If neither Wi-Fi nor a data plan are available, a manager or employee can:
  - A. Seek out Internet access elsewhere, such as at a library.
  - B. Use a land-line telephone.
3. If a conferencing system cannot make a connection:
  - A. Email a printout of the presentation and schedule a conference call on the phone.
  - B. Make an audio or video recording of a presentation and post it on a website.
  - C. Continue the meeting in a chat room.
  - D. Continue the meeting asynchronously in discussion forums.

Problems are going to happen occasionally whenever we rely on mediated communication tools. To prevent stress, communicate your “Plan B” prior to the meeting and, if it is needed, simply transition to that alternative method. A manager sets the tone for the meeting. A calm manager can usually deal with the issues that arise and thereby complete the meeting objectives successfully.

## Exercise 30: Creating a “Plan B”

 5 to 10 minutes

---

Answer the following questions about creating a backup plan.

1. Which of the following are the two best backup plans for a web conference with 20 participants?
  - A. Email the visuals to the participants and proceed with an audio-only conference.
  - B. Email the visuals to the participants and carry on the conversation through email.
  - C. Move to a chat room.
  - D. Text the visuals and comments.
  - E. Post the visuals in an asynchronous discussion forum.
  
2. Which of the following is the best backup plans for a confidential email conversation with a staff member?
  - A. Send a letter.
  - B. Begin an online discussion.
  - C. Text each other.
  - D. Make a phone call.

## Solution

---

1. A. and E.
2. D.

**Evaluation  
Copy**

# Exercise 31: Creating a “Plan B” - Personal Application

 15 to 20 minutes

---

Complete the following activity related to backup plans.

1. Consider your remote work team and the resources available to you and your staff. Write down three methods of communicating that you commonly use.
2. For each of the communication methods you noted, write down at least one backup plan should the first one fail.
3. Write a note to your staff describing these backup plans so they know what to do if communication is ever disrupted.

## Conclusion

In this lesson, you have learned:

- How to overcome issues, including:
  1. Transmission issues.
  2. Compatibility issues.
- How to resolve and prevent problems with:
  1. Backups.
  2. Malware protection.
  3. A backup plan.



# LESSON 6

## Group Communication

---

### Topics Covered

- The importance of avoiding “hallway decisions.”
- The art of facilitation.
- How to manage time.
- How to proactively minimize problems.

### Introduction

Staff that is geographically disbursed often lacks cohesiveness. Staff members may easily neglect to inform each other of events and issues, and staff members’ differing interpretations of information may not be known until a client complains that he or she received contradictory information. A manager should bring the team together periodically for group communications to ensure:

1. All staff members have the same information.
2. All staff members interpret the information consistently and correctly.
3. Staff members are aware of other members’ circumstances, actions, events, and issues.

This lesson discusses methods and practices that result in good, virtual group communication:



### 6.1. Avoiding Hallway Decisions

One challenge when managing virtual teams is to avoid “hallway decisions.” Hallway decisions are decisions made after informal, impromptu meetings. An example of this is:

1. A manager running into a local member of his or her staff or a manager from a different department.

Hallway meetings are not limited to hallways. A hallway meeting may happen in any unplanned location, such as:

1. The hallway (hence the name, “hallway decisions.”)
2. At lunch.
3. After another meeting.
4. As an afterthought during a phone conversation.

In hallway discussions, a quick discussion takes place about an issue, and a decision is made that affects the managers’ staff. Unfortunately, it is very common for these informal decisions to be forgotten and not passed along to some or all of the staff.

In most situations, the best decisions are made when all thoughts are laid out on the table and everyone has had a chance to give input. Ad hoc decisions often overlook important considerations, and this can be avoided by intentionally including other personnel. Virtual group meetings are powerful tools to support intentional communication.

To avoid hallway decisions, managers must be intentional about communication. This means they will:

1. Record all conversations that affect the team.
2. Make hallway decisions only when necessary.
3. Have a communication plan, which includes:
  - A. Agreed-upon methods of communication.
  - B. Regularly scheduled meetings.
4. Communicate with their staff as often as possible.

## Exercise 32: Avoiding Hallway Decisions

🕒 5 to 7 minutes

---

Respond to the following questions about hallway decisions.

1. Which of the following examples describe hallway decisions?
  - A. A chat with all your staff.
  - B. An agreement about a course of action that takes place randomly after an HR presentation.
  - C. A change in corporate policies.
  - D. A departmental decision made between a manager and a staff member during an impromptu one-on-one meeting.
  - E. A supervisor giving directions to a staff member.
  
2. Fill in the missing words:
  - A. To avoid hallway decisions, managers must be \_\_\_\_\_ about communication.
  - B. Intentional communication includes a \_\_\_\_\_ plan with \_\_\_\_\_ meetings.

## Solution

---

1. B. An agreement about a course of action that takes place randomly after an HR presentation, and D. A departmental decision made between a manager and a staff member during a one-on-one meeting.
2. To avoid hallway decisions, managers must be **intentional** about communication.
3. Intentional communication includes a **communication** plan with **regularly scheduled** meetings.



## 6.2. The Art of Group Facilitation

One-on-one communication can take place easily on the phone or through email. Questions are easy to address because there is no competition for the time or communication resources. Group communication is more challenging. Technology affects the type of exchange that takes place. The users need to know the basic mechanics of the system in order to hear and to speak. The facilitator needs to know how to direct the conversation.

There are different types of group communication, which include:

1. Audio-only conferencing, such as:
  - A. Teleconferencing, using wired or wireless phone systems.
  - B. VOIP, such as MagicJack or Skype audio.
2. Simple web conferencing, which includes both audio and video, such as:
  - A. Skype.
  - B. Facetime.
3. Advanced web conferencing and video conferencing, which adds other features, such as desktop sharing, chat, and polling. Examples include:
  - A. Web conferencing:
    - i. Go To Meeting.
    - ii. WebEx.
    - iii. Illuminate.
  - B. Video conferencing systems:
    - i. Tanburg.

- ii. Polycom.
  - iii. Cisco.
4. Text-based systems, which include discussion forums (asynchronous) and chat (synchronous):
- A. Chat is less than optimal for larger groups because of:
    - i. The potential for multiple concurrent conversations.
    - ii. The different speed of typing and reading among participants.
    - iii. The difficulty in facilitating the conversation.
  - B. Discussion forums work well for conversations that are not time-sensitive, when the emphasis is on analysis and brainstorming.

Virtual group conversations can be very frustrating for people because:

- 1. When voice is used, dominant people can monopolize the conversation.
- 2. People cannot see each other in audio communications and presentation-based communications.
- 3. People forget that they are visible in video conferencing systems.

The facilitator's role is to try to prevent these and other issues from taking place in the meeting. Ultimately, facilitation is simply ensuring that all members are respectful of other members and the conversation stays on track.

The objectives of facilitation are to:

- 1. Promote quality communication.
- 2. Encourage participation.
- 3. Discourage control.
- 4. Avoid and minimize disruptions.

When using discussion forums, disruptions and control are not often an issue because participants have equal opportunity to contribute, and they can contribute throughout the day around their work schedules.

### ❖ 6.2.1. Promote Quality Communication

Quality communication is informational, thoughtful, and respectful. The following are basic guidelines for the facilitators using audio and video tools:

1. Make certain that everyone hears comments from others. This may mean the facilitator repeats the comments.
2. Make certain everyone has a turn to speak.
3. Make certain everyone announces himself or herself when they speak, so others can follow the conversation easily.
4. Ask speakers to look at the camera, not the screen or monitor, in conferences that use video. The camera replaces the eyes of the other participants at different locations. From the other people's perspective, it can be distracting if the speaker is looking away from the camera.
5. Move slowly and describe your movements when sharing desktops or other media, such as a document camera. It takes time for video signals to reach the other participants. Slow movement prevents the images from looking choppy, blurry, or distorted on the other end of the line.

As a manager, you are likely to be the meeting facilitator. Facilitators are tasked with making sure the meeting runs well and is productive. In online discussions, facilitators also need to:

1. Moderate disagreements.
2. Keep the conversation on topic.
3. Direct discussions by asking for input from all participants and asking questions that encourage more thought and stimulate ideas.

## ❖ 6.2.2. Encourage Participation

In any synchronous meeting, three primary factors affect participation dynamics in meetings.

1. The ability of some people to think before they speak.
2. The dominance of people who naturally speak and think (or don't think) at the same time.
3. The opportunity given to the participants to contribute.

Most techniques used to encourage participation in live, online meetings are the same techniques we would use in a traditional face-to-face meeting. People who process internally are not likely to speak up instantly. When the facilitator gives them time, even though it feels awkward, he or she can encourage the quiet participant to contribute to the conversation.

People who find it easy to speak do not usually need encouragement, but they should be acknowledged. After they have shared their thoughts, the quieter people should be offered adequate time to respond.

In some types of live exchanges, rotation is the best way to handle time fairly. Be sure to allow time at the beginning and end of the meeting for introductions and wrap-up, and allow time for questions and discussion.

A challenge to communicating in a virtual environment is that it provides the quiet participant a better chance to hide and avoid contributing because they aren't physically "there." This makes it all the more important that the facilitator encourages participation. Rotating from one site to another and asking a question like, "Does anyone in Cleveland have a response to the last statement?" may bring the participants to the forefront without addressing one individual directly.

Discussion forums are excellent for bringing out quiet participants. If you struggle getting quieter staff members to share, open a follow-up discussion forum if one is available to you. Solicit ideas related to the meeting topics. This will:

1. Allow quieter participants time to think about the issue before sharing.
2. Eliminate any intimidating factors that may be present in live meetings.

### ❖ 6.2.3. Discourage Control

There are certain people that tend to talk a lot, and some that simply like attention. These people can monopolize synchronous live meetings if not kept in check. The way to manage meeting controllers is to:

1. Set a time limit on how long each person can speak.
2. Remind the participants about the time limit at the beginning of the meeting.
3. Enforce the time limits.

The last item is the most difficult. When a person known to be vocal is ready to speak, subtly remind them of the limit. For example, you might say, "Bob, the next four minutes are yours. What updates do you have for us?"

If the person is nearing the end of their time limit and appears to intend to go beyond that time, the facilitator needs to interrupt that person and remind him or her of the time constraint. Most people will wrap up at that point, but some will simply continue.

Unless the person is sharing critical information, the facilitator needs to stop the person. He or she might say, "Bob, I need to stop you here so others have a chance to speak. Let's write your topic down so we can hear more of your ideas if we have time at the end of the meeting, or in our next meeting."

## ❖ 6.2.4. Minimizing Disruptions

When a person is speaking in a live, virtual meeting, all other participants should be as attentive as possible to hear what the speaker is saying. However, little unintentional sounds and behaviors can interfere with the message, including things that wouldn't take place or wouldn't be disruptive in a traditional face-to-face meeting. Consider these noises that are picked up by microphones:

1. Typing.
2. Talking (side conversations, rude comments).
3. Traffic.
4. Children and pets.
5. Ceiling fans and air conditioners.
6. Shuffling papers.
7. Breathing, coughing, and sneezing.

Behaviors can also distract. Listed below are four examples:

1. People walking in and out of rooms during video conferences.
2. Participants getting up and moving around during video conferences.
3. Participants leaving the conference unannounced.
4. Participants not waiting for the extended pause caused by delayed transmission, thus speaking over other participants.

And finally, meetings can be disrupted by avoidable technology issues, such as:

1. Inferior equipment or setups which don't transmit voice or visuals well.
2. Audio from the meeting, causing an echoing effect.
3. A participant who does not know how to use the system.

To minimize these disruptions, create a list of expectations for the meeting, and communicate them to the participants. The list should include the use of the features available within the system being used, and should include the following:

1. Turn off all cell phones during the meeting.
2. In a teleconference, never put your phone on hold as your hold music might play.
3. In a teleconference, turn off call waiting.
4. When not speaking, mute your microphone.

5. If you must step out, always inform the facilitator or another participant and say when you'll return.
6. Avoid side conversations.
7. When you wish to speak, announce your name.
8. Always inform the facilitator as soon as possible if audio or video signals fade, die, or are not clear.
9. Precheck the local setup to verify the audio and video are working well.

Additionally, you, as the facilitator, can minimize the time spent on problems by testing for technology issues. You should:

1. Never assume you can be seen or heard.
2. Always perform sound and video checks with every connecting site at the beginning of meetings.
3. Occasionally and throughout the meeting, check with participants at each site to make certain the sound and video continue to be good.

## Exercise 33: Group Facilitation

 10 to 12 minutes

---

Respond to the following questions about facilitating group meetings.

1. List the objectives of facilitation.
2. To which objective of facilitation does each the following descriptions relate?
  - A. Setting time limits.
  - B. Making certain participants can follow camera movements.
  - C. Testing sound and video at the beginning of the meeting.
  - D. Asking for input from all sites.
  - E. Returning to a topic if there is time.
  - F. Turning off cell phones.
  - G. Repeating comments so that all participants can hear them.
  - H. Rotating from person to person for updates and comments.



## Solution

---

1. The objectives of facilitation are:
  - A. Promote good communication.
  - B. Encourage participation.
  - C. Discourage control.
  - D. Avoid and minimize disruptions.
  
2.
  - A. C. Discourage control.
  - B. A. Promote good communication.
  - C. D. Avoid and minimize disruptions.
  - D. B. Encourage participation.
  - E. C. Discourage control.
  - F. D. Avoid and minimize disruptions.
  - G. A. Promote good communication.
  - H. B. Encourage participation.

# Exercise 34: Group Facilitation - Personal Application

🕒 20 to 30 minutes

Complete the following assignment.

1. Think about your staff, and your next virtual meeting.
  - A. List the tools that will be available for your use, such as desktop sharing, chat, etc.
  - B. Describe the possible problems you may encounter.
  - C. Now write a list of things you, as the facilitator, should do to ensure a smooth meeting:
    - i. At the beginning of the meeting.
    - ii. During the meeting.
    - iii. At the end of the meeting.
  - D. Describe how you will address possible technical issues.
  - E. Write a checklist for all participants to follow both prior to and during the meeting.



## 6.3. Time Management

Time management is a challenge in any meeting, but it can be even more difficult in synchronous virtual meetings because we tend not to take into consideration how technology affects the interaction.

Technology can impact communication directly and indirectly. Direct impact includes:

1. Technology may have momentary outages or interruptions.
2. Interference (noise) may make it necessary to repeat things.
3. Technology can fail.

Technology can impact communication indirectly in the following ways:

1. Time is needed for audio and visual prechecks.
2. Participants have to wait for transmission delays.

3. Participants may not be adept at using the technology.

A prudent facilitator will plan extra time for these issues. Ten to fifteen minutes is normally enough to adequately compensate for this. Additionally, the facilitator should have a backup plan in case any component of the technology fails. Backups may include:

1. Emailing the presentation document to the participants should the visual component of the presentation fail.
2. Using a form of written communication, such as a chat, should audio fail for one or more participants.
3. Resorting to asynchronous discussion should immediate connectivity fail.

When planning a meeting,

1. Set an approximate time each person is expected to speak.
2. Plan for questions and discussion.
3. Add time for technical issues, as described above.
4. Delegate a person in the meeting to be a timekeeper.

Delegating a person to be the timekeeper serves multiple purposes, as follows:

1. A timekeeper helps to keep the meeting on track while the facilitator concentrates on the content.
2. Announcing the timekeeper at the beginning of the meeting reminds all participants that there is limited time.
3. Selecting a timekeeper creates buy-in from the participants regarding the schedule.

If you know that one of your staff members tends to use a lot of time, he or she may be a good candidate for the timekeeper role.

### ❖ 6.3.1. Using a Parking Lot

If something comes up in the meeting that is not on the agenda, but is worthy of addressing, put it in the “parking lot.” The parking lot is a list of future agenda items.

By writing the issue down, a time can be planned to address the issue. If the current meeting’s topics are covered before the planned ending time, parking lot items can be addressed during the meeting.

## Exercise 35: Time Management

 5 to 7 minutes

---

Respond to the following questions about time management in synchronous virtual meetings.

1. Which of the following is not a true statement?
  - A. Time is needed for audio and visual prechecks.
  - B. Audio and visual prechecks eliminate technology concerns.
  - C. Interference (noise) may make it necessary to repeat things.
  - D. The parking lot is a list of future agenda items.
  - E. A timekeeper helps to keep the meeting on track while the facilitator concentrates on the content.
  
2. Which of the following are true statements?
  - A. Technology has no effect on time in a synchronous virtual meeting.
  - B. Time management is more difficult in asynchronous meetings.
  - C. Technology affects communication indirectly if it fails.
  - D. Audio communication is a good backup for a problematic chat.
  - E. The “parking lot” is a place to put future discussion items.
  - F. Chat may be a good backup for problematic audio.

## Solution

---

1. B. Audio and visual prechecks eliminate technology concerns.
2. E. Chat may be a good backup for problematic audio, and F. The “parking lot” is a place to put future discussion items.



## 6.4. Proactively Avoiding Problems

Proactive planning can reduce barriers and make meetings go smoother. A list of what should be done before the meeting follows:

1. A backup plan should be drafted, to be implemented if technology fail, thus insuring that the meeting will continue. This plan should include:
  - A. The amount of time you are willing to spend for technical trouble shooting before going to the alternate meeting plan.
  - B. The number of interruptions you are willing to allow before going to the alternate meeting plan.
2. The agenda and handouts should be made available to the participants in advance. This may be done through:
  - A. Email.
  - B. Inter-office mail.
  - C. Posted on a shared drive or workspace.
  - D. Any other method that works for all participants.
3. A document or addendum should be included with the agenda explaining:
  - A. The mechanics of communicating in the meeting.
  - B. The meeting protocol (acceptable and unacceptable behaviors).
  - C. The approximate time allowed for each speaker.
4. The facilitator should arrive early to test equipment.
5. When the meeting starts, the facilitator should:
  - A. Test all connections for sound and visuals.
  - B. Check with all sites to make certain they understand the mechanics of the system.
  - C. Review the protocol.

# Exercise 36: Proactively Avoiding Problems

 5 to 7 minutes

---

Respond to the following questions about media.

1. Which of the following are good practices?
  - A. Sending out handouts through inter-office mail.
  - B. Informing participants of what constitutes acceptable behavior during the meeting.
  - C. Sending out documents prior to the meeting.
  - D. Testing all connections for sound and visuals.
  - E. Trusting each site to test their own system.
  - F. Knowing in advance how long you will wait for resolution, should technology issues arise.

## Solution

---

1. B. Informing participants of the acceptable behavior during the meeting; C. Always sending out documents prior to the meeting; E. Testing all connections for sound and visuals. and F. Knowing in advance how long you will wait for technology.

# Exercise 37: Proactively Avoiding Problems - Personal Application

 10 to 15 minutes

---

Perform the following task related to proactive planning.

1. Building on the previous personal application exercise, create a plan that you can put in place should technology fail. Include:
  - A. At what point you will move to the alternate technologies.
  - B. How materials will be distributed.
  - C. What, specifically, you will test prior to the meeting.

## Conclusion

In this lesson, you have learned

- The importance of avoiding hallway decisions.
- The art of facilitation.
- How to manage time.
- How to avoid problems proactively.