Unit 8: Communications Management

(PMBOK® Guide, Chapter 10)

The questions on this topic are very straightforward and you can rely on “common sense” for many of the questions. The PMI Director of Certification was once quoted as saying, “If you know which end of the phone to talk into, you can pass this section.” See course slide #8-1 for an overview of communication management.

Major Processes

10.1 Plan Communications Management (determining the information needs of stakeholders and defining a communication approach based on available organizational assets)

10.2 Manage Communications (creating, collecting, distributing, storing, retrieving, and disposing of project information in accordance with the communications plan)

10.3 Control Communications (monitoring and controlling communications to ensure the information needs of stakeholders are met)

The PMBOK® Guide defines communication management as “the processes that are required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and ultimate disposition of project information.” PMI notes that project managers spend most of their time communicating with stakeholders who often have different perspectives, interests, and expertise. Effective communication can bridge potential gaps among these stakeholders and increase the chances of successful project outcomes.

The various dimensions of communicating include the following (PMBOK® Guide, p. 287):

- Written and oral
- Verbal (voice inflection) and non-verbal (body language; various sources contend that non-verbal constitutes over 50% of the communication process)
- Internal (within the project) and external (customer, public, other projects)
- Formal (briefings, reports) and informal (emails and ad hoc conversations)
- Vertical (bosses and subordinates) and horizontal (with peers)
- Official (published reports) and unofficial (off the record)

**NOTE:** The combinations of formal/informal and written/oral are especially important for the exam. Know the following:
### Method

<table>
<thead>
<tr>
<th>Method</th>
<th>When Used</th>
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<tbody>
<tr>
<td>Formal, Written</td>
<td>Contractual issues, project documentation, some e-mails</td>
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<tr>
<td>Formal, Oral</td>
<td>Presentations, speeches, some meetings</td>
</tr>
<tr>
<td>Informal, Written</td>
<td>Memos, some e-mails, notes</td>
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<tr>
<td>Informal, Oral</td>
<td>Conversations, some meetings</td>
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PMI also suggests that the following general communication skills are important for project managers:

- Active listening (paraphrasing, repeating what you heard someone say)
- Questioning and probing
- Educating to increase team’s knowledge
- Fact-finding and managing expectations
- Persuading, motivating, and coaching others
- Negotiating and resolving conflict
- Summarizing, recapping, and identifying next steps

### 10.1 Plan Communications Management (PMI® Guide, p. 289)

Communications planning involves discovering the information needs of stakeholders and devising an appropriate communication plan based on available organizational assets. The plan should address who needs what information, when they need it, how they will get it, and who will give it to them. *NOTE: PMI says most communication planning should be done early in the project, but the process should be reviewed regularly.*

PMI distinguishes effective communication (information provided to the right audience, in the right format, and at the right time) from efficient communication (providing only the information needed; avoiding information overload).
### Plan Communications Management

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Tools</th>
<th>Outputs</th>
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<tbody>
<tr>
<td>1. Project management plan</td>
<td>1. Communication requirements analysis</td>
<td>1. Communications management plan</td>
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<td>2. Stakeholder register</td>
<td>2. Communication technology</td>
<td>2. Project documents updates</td>
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<td>3. Enterprise environmental factors</td>
<td>3. Communication models</td>
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<td>4. Organizational process assets</td>
<td>4. Communication methods</td>
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<td>5. Meetings</td>
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**Four Key Inputs for Plan Communications Management (PMBOK® Guide, p. 290):**

1. **Project Management Plan:** Provides information on how the project will be executed, monitored, controlled, and closed.

2. **Stakeholder Register:** An output of the first stakeholder management process (PMBOK® Guide, Section 13.1, Identify Stakeholders), the register identifies potentially important stakeholders.

3. **Enterprise Environmental Factors:** All the factors described in PMBOK® Guide, Section 2.1.5 are potentially relevant to communication planning.

4. **Organizational Process Assets:** All Organizational Process Assets are relevant to communication planning, but lessons learned and historical information from similar projects are of particular importance.

**Five Key Tools for Plan Communications Management (PMBOK® Guide, p. 291):**

1. **Communication Requirements Analysis:** Determines the information needed by stakeholders. PMI says the process should focus only on information really needed for success; in other words, beware of information overload or distracting minutiae.

The concept of communication channels within a team is important for the exam. You must know that as the project team grows larger, the number of communication channels also increases. The number of channels provides a measure of the complexity of communication on a given project. You must
know that the number of communication channels increases at greater than a linear rate. **See course slide #8-2 to review an example.**

The following information helps determine communication requirements:

- Organization charts and stakeholder relationships
- The specific departments and functional specialties involved
- The number of people and locations
- Internal vs. external information needs
- Stakeholder information (who are they and what concerns do they have?)

2. **Communication Technology:** Methods used to transfer information; the spectrum ranges from low tech (conversations and meetings) to high tech (automated, computerized systems). Relevant factors in choosing appropriate technology include:

- Urgency of the need
- Current technology already in use (Is it sufficient?)
- Ease of use/Expected staffing (Is the proposed system compatible with the team’s experience?)
- Length of the project (Will available technology change during the project?)
- Project environment (For instance, a virtual team might depend on more advanced technologies.)
- Sensitivity and confidentiality (Will any unusual security measures be required?)

3. **Communication Models:** PMI displays the following basic communication model in Figure 10-4 (*PMBOK® Guide*, p. 294):

- **Encode:** A sender encodes thoughts into a message that will be understood by others.
- **Transmit Message:** The output of encoding is to send the message using an appropriate medium (voice, letter, email, and so on). PMI identifies “noise” as anything that might interfere with the transmission, receipt, or understanding of the message (technical jargon, language barriers, distance/time zones, lack of background information, etc.).
- **Decode:** A receiver translates the information into an understandable message.
• **Acknowledge:** The receiver should acknowledge receipt of the message. PMI cautions that receipt of a message does not necessarily mean that agreement or understanding has occurred.

• **Feedback/Response:** Once the message has been decoded and understood, the receiver sends a response to the original sender.

**Special note for the exam:** PMI says that project managers spend as much as 90% of their time acquiring and communicating information! Senders and receivers each have important and specific responsibilities during the communication process:

**The sender is responsible for:**

- Making the information clear, unambiguous, and complete
- Confirming the receiver’s understanding

**The receiver is responsible for:**

- Making sure the entire message was received
- Confirming the message was understood correctly. **Active listening is a relevant skill here, that is, paraphrasing to check for understanding.**

**Other notes for the exam:**

1) Formal communication is best handled in writing.

2) Advantages of verbal communication include: fast, immediate feedback (ability to clarify), and supports the brainstorming needed to solve complex problems.

3) Effective listening includes:

   a. Asking for clarification
   b. Repeating what you heard (seeking confirmation)
   c. Watching body language (non-verbal clues)
   d. Maintaining eye contact
4. Communication Methods: PMI describes three methods of sharing information among stakeholders:

- **Interactive Communication**: Two or more parties at the same time, multi-directional. Quick, efficient way to exchange information.

- **Push Communication**: Information sent to specific people or groups. Does not ensure that information was received and/or understood.

- **Pull Communication**: Used for large volumes of information and/or large audiences (intranet, e-learning). Allows recipients to access the information when needed.

5. Meetings: Provide a logical forum for the team to discuss the best way to communicate project information and respond to stakeholders. Key points:

- Most meetings involve resolving problems and/or making decisions.

- While there are casual, informal meetings; most meetings should be planned as to the time, place, and agenda. Minutes should be documented and shared with appropriate stakeholders.

**Two Key Outputs for Plan Communications Management (PMBOK® Guide, p. 296):**

1. **Communications Management Plan**: The primary output of communication planning is the communications management plan. This plan documents how information will be handled and provides the following:

   - Stakeholder communication requirements
   - Information to be communicated
   - Purpose (the reason the information is needed)
   - Senders and receivers
   - Format, medium, and technology
   - Frequency (daily, weekly, monthly) plus start/end dates
   - Escalation process
   - Method for updating the communication plan
   - Glossary of common terms
   - Information flows and communication constraints (regulations, organizational policies, or technology limitations)
2. Project Documents Updates: May include:
   - Project schedule
   - Stakeholder register

10.2 Manage Communications (PMBOK® Guide, p. 297)

Managing communications involves the process of creating, distributing, storing, retrieving, and disposing of project information as established by the communications management plan. This process distributes relevant information that has been appropriately generated, received, and understood. The process must also allow follow-on requests for additional information, clarification, and discussion. Effective communication involves the use of techniques such as the following:

- **Sender-receiver models:** Feedback loops and barriers
- **Choice of media:** Written vs. oral, formal vs. informal, face to face vs. email
- **Writing style:** Active vs. passive voice, word choice, and sentence structure
- **Presentation techniques:** Body language and visual aids
- **Meeting management techniques:** Use of agendas and managing conflict
- **Facilitation techniques:** Building consensus and overcoming obstacles
- **Listening techniques:** Acknowledging, clarifying, and confirming understanding

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<th>Manage Communications</th>
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<td><strong>Inputs</strong></td>
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<td>1. Communications management plan</td>
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<td>2. Work performance reports</td>
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<td>4. Organizational process assets</td>
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Four Key Inputs for Manage Communications (PMBOK® Guide, p. 299):

1. **Communications Management Plan:** Describes how communications will be planned, structured, monitored, and controlled (See PMBOK® Guide, Section 10.1.3.1).
2. **Work Performance Reports:** Used to collect and distribute performance and status information. These reports should be as accurate and current as possible.

3. **Enterprise Environmental Factors:** Factors that may influence managing communications include:
   - Organizational structure
   - Government or industry regulations/standards
   - Project management information system

4. **Organizational Process Assets:** Organizational Process Assets that may influence managing communications include:
   - Policies, procedures, and processes regarding communications
   - Templates
   - Historical information and lessons learned

**Five Key Tools for Manage Communications (PMBOK® Guide, p. 300):**

1. **Communication Technology:** Described previously (PMBOK® Guide, Section 10.1.2.2), the important outcome here is that appropriate communication technologies are chosen which meet the information needs of the project.

2. **Communication Models:** Selecting appropriate communication models and making sure that potential communication barriers (noise) are identified and managed.

3. **Communication Methods:** Depending on circumstances, choosing interactive vs. push vs. pull forms of communication.

4. **Information Management Systems:** Distributing project information using tools such as:
   - Hard copy document management: letters, memos, reports, and press releases
   - Electronic communications management: e-mail, fax, voice mail, telephone, video conferencing, and web publishing
   - Electronic project management tools: project management software, meeting support software, portals, and collaborative work management tools
5. **Performance Reporting:** Performance reporting involves collecting and disseminating performance information for project stakeholders. Reporting usually focuses on scope, schedule, cost, quality, risk, and procurement. Performance reports should analyze the differences between planned (baseline) data and actual status. Reporting is often done on an “exception” basis (focusing only on status that exceeds acceptable thresholds). Reporting should also be appropriately detailed for the intended audience. Reporting includes three major categories:

- Status reports (where the project now stands; analyzes variances)
- Progress reports (what the team has accomplished; list of deliverables completed or partially completed)
- Forecasting (predicting future status; earned value measures such as EAC, ETC, and VAC)

While some reports are simple, more elaborate reports may address factors such as:

- Past performance and forecasts of schedule and cost
- Current status of risks and other issues
- Work actually completed vs. work that should have been completed
- Summary of changes approved

**Four Key Outputs for Manage Communications (PMBOK® Guide, p. 301):**

1. **Project Communications:** Typical communications include performance reports, status of deliverables, schedule progress, costs incurred, and the status of changes. Communications are affected by urgency, appropriate method for delivery, and the level of confidentiality required.

2. **Project Management Plan Updates:** Areas that may be updated include project baselines (scope, schedule, and cost), communications management, and stakeholder management. As a reminder, project baselines represent the currently approved plan and actual work outcomes are compared so that deviations (variances) can be analyzed for management control.

3. **Project Documents Updates:** Documents that may be updated include the issue log, the project schedule, and funding requirements.
4. Organizational Process Assets Updates: Should include the following:

- Lessons learned documentation
- Project records: correspondence and other important information stored in an organized fashion (project notebooks are suggested)
- Project reports and presentations
- Feedback from stakeholders
- Information provided to stakeholders (stakeholder notifications)

10.3 Control Communications (PMBOK® Guide, p. 303)

Control Communications is the process of monitoring and controlling communications during the entire project life cycle to ensure that the information needs of stakeholders are met effectively and efficiently. This control process may result in repeated iterations of the previous planning and managing processes. The ultimate goal is that the project continues to deliver the right message to the right people at the right time.

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<th>Control Communications</th>
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<tr>
<td><strong>Inputs</strong></td>
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<tr>
<td>1. Project management plan</td>
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<td>2. Project communications</td>
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<td>5. Organizational process assets</td>
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Five Key Inputs for Control Communications (PMBOK® Guide, p. 304):

1. **Project Management Plan:** Contains the communications management plan described in Section 10.1.3.1. Information contained in the communications plan that may affect controlling communications includes:

- Stakeholder communication requirements
- Reason, timeframe, and frequency for distribution of required information
- Individual or group responsible to communicate the information
- Individual or group receiving the information
2. **Project Communications:** At a minimum, project communications should address the status of deliverables, schedule progress, and costs incurred. Factors such as format, level of detail, degree of formality, and confidentiality will vary according to individual needs of the project and its stakeholders.

3. **Issue Log:** Documents issues and monitors resolution. Used to facilitate communication and ensure that important issues are not forgotten or overlooked. Each issue should be clearly described, an appropriate action owner should be assigned, and a target date for resolution or follow-up should be established.

4. **Work Performance Data:** Summarizes and organizes raw information that has been collected. This information is then used to compare actual status to the planned project baselines.

5. **Organizational Process Assets:** Organizational Process Assets that may influence Control Communications include:
   - Report templates and available communication technologies
   - Policies, standards, and procedures for communicating
   - Allowed communication media
   - Record retention policies and security requirements

**Three Key Tools for Control Communications (PMBOK® Guide, p. 306):**

1. **Information Management Systems:** Provides standard tools for collecting, storing, and distributing information about costs, schedule, and performance to appropriate stakeholders. Examples of distribution formats include:
   - Table reports
   - Spreadsheet analysis
   - Presentations
   - Graphical, visual representations of performance data

2. **Expert Judgment:** Applies specialized technical and management knowledge to determine the need for intervention, action plans, assigning responsibility, and determining appropriate timeframes.

3. **Meetings:** Meetings provide a forum for discussing project performance and responding to requests from stakeholders. As always, meetings should be managed effectively with the use of appropriate locations, agendas, and timeframes.
Five Key Outputs for Control Communications *(PMBOK® Guide, p. 307)*:

1. **Work Performance Information:** Summarizes and communicates performance data at the level needed by various stakeholders. As usual, the data (at a minimum) typically include scope, schedule, and cost status.

2. **Change Requests:** Whenever controlling communications leads to a change request, the request is reviewed using the Perform Integrated Change Control process. Results may include:
   - Revisions to costs, activities, schedules, resources, and risks
   - Updates/adjustments to the project management plan and related documents
   - Recommendations for corrective or preventive actions

3. **Project Management Plan Updates:** Portions of the plan that may be updated include the communications management plan, stakeholder management plan, and human resource management plan.

4. **Project Documents Updates:** Documents that may be updated include forecasts, performance reports, and issue logs.

5. **Organizational Process Assets Updates:** Organizational Process Assets that may affect managing stakeholders include:
   - Causes of issues
   - Reasoning for corrective actions
   - Lessons learned from managing stakeholder expectations

**Other Topics:**

**Barriers to communication:** PMI says, among other problems, the presence of communication barriers is likely to lead to increased conflict. Examples of communication barriers include:

- Cultural differences
- Lack of clear communication channels
- Physical and temporal distance (time zones)
- Technical language
- Distracting environment (noise, temperature)
- Poor attitudes (personal antagonism)
Effective team communication: PMI endorses six actions to improve team communications. See course slides #8-3 and #8-4.

1. Be an effective communicator: Project managers should foster two-way communication by encouraging feedback and consensus building. Note that PMI says effective communicators have high regard for the opinions and feelings of other people.

2. Be a communications expeditor: The PM should establish both formal and informal communication channels. PMI says the use of formal and informal methods enhances project integration.

3. Discourage the use of communications blockers:
   - It'll never work
   - The boss won’t buy it
   - Get real
   - That’s nice, but it’s too expensive
   - We tried that … it didn’t work

4. Use a “tight” matrix: Involves physical colocation of the team in a single location. Minimizes distractions, speeds communication and decision making, and enhances working relationships. Not the same as a weak or strong matrix!

5. Get a project war room: A location owned by the project team for meetings, storage of information, and so on. Especially important if a tight matrix is not possible. “Improves identity with the team.”

6. Make meetings effective: PMI surveys have revealed that meetings are a major time sink for project managers. Effective use of everyone’s time is crucial. Therefore, call meetings only when they are really needed. Follow good meeting policies such as:
   - Communicate the purpose
   - Have and follow an agenda
   - Identify length and location
   - Include team building when possible (a favorite tool for PMI)
   - Assign action items and issue minutes
Note: PMI says there are four important roles for a meeting chairperson. They are:

1. Encourage participation
2. Handle differences of opinion
3. Prevent drift and disruption
4. Periodically summarize key issues

Role of the project manager: PMI says the key to successful communication is a project manager who is a good communicator. This statement may seem simplistic, obvious, and plagued by circular reasoning, however, it is indeed very true!

Documentation: Good documentation is associated with successful projects. Key points include:

- Documentation is important regardless of project size.
- Good documentation will assist in reducing unauthorized changes in scope.
- PMI identifies two kinds of documentation especially relevant for project communication:

  1) Progress reports

  2) Project management plan: Preparation of the plan helps reduce uncertainty (because of the analysis involved). Distribution of the plan keeps people informed.

Organizational structure: Of the organizational structures identified by PMI, communication and information flows are believed to be the most complex in the matrix environment.
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<th>Question</th>
<th>Answer</th>
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| 1. Formal communication is best handled __________.                     | 1. in writing (p. 8-5)  
   Note: All page numbers in this drill practice refer to the study guide unless otherwise indicated. |
| 2. Name four types of communication associated with formal and written. | 2.  
   Formal, written  
   Formal, oral  
   Informal, written  
   Informal, oral (pp. 8-1/2) |
| 3. What can a recipient of information do to improve communication?      | 3. Practice active listening, i.e., paraphrasing the speaker’s message to check for understanding (pp. 8-2, 8-5) |
| 4. What type of communication should be used to document customer acceptance of major project deliverables? | 4. Formal, written (falls under the heading of contractual issues) (p. 8-2) |
| 5. Identify four aspects of effective listening.                        | 5.  
   • Repeating what was said (feedback)  
   • Asking for clarification  
   • Watching for nonverbal clues (body language)  
   • Maintaining eye contact (p. 8-5) |
| 6. Your project team just gained five new members, bringing the team size to a total of ten. How many additional communication channels must you now handle? | 6.  
   n (n - 1) / 2  
   Old team: 5 (4) / 2 = 10 channels  
   New team: 10 (9) / 2 = 45  
   Additional channels = 45 - 10 = 35  
   (pp. 8-3/4) |
| 7. What factor might increase the chances of conflict on your project?  | 7. The presence of various communication barriers (p. 8-12) |
| 8. What is a major key to successful communication on a project team?    | 8. A PM who is a good communicator (p. 8-14). |
| 9. How much of a project manager’s time is spent acquiring and communicating information? | 9. According to a PMI survey, a major percentage (as much as 80 to 90 percent) (p. 8-5). |
### Question and Answer

<table>
<thead>
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<th>Question</th>
<th>Answer</th>
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| **10. What are the primary tools recommended for communication planning?**                                                                                                                                   | Communication requirements analysis  
Communication technology  
Communication models  
Communication methods  
Meetings (pp. 8-3 to 8-6).                                                                                                                                 |
| **11. According to a PMI survey, what communication barriers could hamper a project?**                                                                                                               | • Cultural differences  
• Lack of clear communication channels  
• Physical/temporal distance  
• Technical language  
• Distracting environment (noise)  
• Poor attitudes (personal antagonism) (p. 8-12)                                                                                                                                 |
| **12. Who is the key to all project communications?**                                                                                                                                                   | The project manager (p. 8-14)                                                                                                                                 |
| **13. What is a tight matrix?**                                                                                                                                                                         | Providing an environment where team members work in a single, physical office space, i.e., colocation. This practice improves communication and reduces distractions (p. 8-13). |
| **14. The use of both formal and informal communication is likely to enhance _____**                                                                                                                   | project integration (p. 8-13).                                                                                                                                 |
| **15. What are the responsibilities of the chairperson of a meeting?**                                                                                                                                    | • Encourage participation  
• Handle differences of opinion  
• Prevent disruption/drift  
• Summarize/highlight key issues (p. 8-14)                                                                                                                                 |
<p>| <strong>16. Change requests is an output to which communication process?</strong>                                                                                                                                     | Control Communication; all monitor and control processes have change requests as an output (p. 8-12)                                                                                                                                 |
| <strong>17. Effective communicators have ______.</strong>                                                                                                                                                              | high regard for the thoughts and feelings of other people (p. 8-13).                                                                                                                                 |
| <strong>18. What effect does disseminating the project management plan have on performance?</strong>                                                                                                                 | Uncertainty is reduced and project stakeholders are appropriately informed (p. 8-14).                                                                                                                                 |</p>
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<tr>
<td>19. The results of controlling communications could have what possible effect on the two previous processes (plan and manage)?</td>
<td>19. Repeated iterations of Plan Communications and Manage Communications could occur (p. 8-10).</td>
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<tr>
<td>20. Which of the following is not an input to Control Communications?</td>
<td>20. Information management systems, which is a tool (pp. 8-10/11)</td>
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<tr>
<td>- Project management plan</td>
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<td>- Project communications</td>
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<td>- Issue log</td>
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<td>- Information management systems</td>
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<td>21. Name six possible dimensions of communication.</td>
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<td>- Written or oral</td>
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<td>- Verbal or non-verbal</td>
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<td>- Internal or external</td>
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<td>- Formal or informal</td>
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<td>- Vertical or horizontal</td>
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<td>- Official or unofficial</td>
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<td>22. Identify four guidelines for effective meetings.</td>
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<td></td>
<td>- Clear purpose</td>
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<td>- Agenda</td>
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<td>- Convenient location</td>
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<td>- Defined length</td>
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<td>23. What are the five outputs for Control Communications?</td>
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<tr>
<td></td>
<td>- Work performance information</td>
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<td>- Change requests</td>
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<td>- Project management plan updates</td>
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<td>- Project documents updates</td>
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<td>- OPA updates</td>
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<td>24. Name three important categories of performance reporting.</td>
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<td>- Status reporting (where project now stands)</td>
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<td>- Progress reporting (what the team has accomplished)</td>
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<td>- Forecasting (predicting future status/progress)</td>
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(p. 8-1)
25. Name three advantages of verbal communication.

25. Quick  
   Can clarify / use immediate feedback  
   Supports brainstorming needed to solve complex problems (p. 8-5)

26. The ______ process is part of planning and produces what two outputs?

26. Plan Communications Management.  
Communications management plan and project documents updates (pp. 8-6/7).

27. What are some communication-related disadvantages of the matrix organization?

27. Multiple bosses  
   Conflict over differing priorities  
   Team members are borrowed (commitment may be lacking)  
   Team members may see only pieces of many projects (lack sense of completion)  
   Information flows are complex (p. 2-6)

28. What are communication blockers?

28. Negative statements that kill good ideas, such as:  
   • We tried that—it didn’t work  
   • It’ll never fly with the boss  
   • C’mont, get real  
   • That’s interesting, but it’s too expensive (p. 8-13)

29. What is an advantage of having a project war room?

29. Helps provide a sense of “identity” for team members (p. 8-13)

30. What are the five parts of the communication model?

30. Encode  
   Transmit message (includes medium and noise)  
   Decode  
   Acknowledge  
   Feedback/Response (pp. 8-4/5)