

## Teamwork Training

### Technology and Group Communication

As technology becomes more accessible, groups will hold more of their meetings either on-line or via video or telephone connections.

#### Examples

- Teleconferences in which the group members talk via the telephone.
- Videoconferences in which a video and audio connection allows the group members to communicate with each other.
- Computer text based discussions – online chat, email groups and wiki's.

#### Advantages

First, they are usually inexpensive to operate. Instead of traveling long distances to meet, groups can meet over the telephone or via email. In addition, when using email or telephones, the group does not have to meet as a whole. It can carry on its business over time and without everyone being present.

#### Disadvantages

When communicating via the telephone or by email, it is difficult to judge other group members' nonverbal expressions. Also, the technology can be a difficult adjustment. Finally, the social aspects of the group are downplayed when the group does not meet face to face.

#### Class Activity

Use your experience of the meetings and team activities to answer the following questions:

What are the verbal and nonverbal communication differences between online groups and face-to-face groups in which you have participated?

What are the verbal and nonverbal communication similarities between online groups and face-to-face groups in which you have participated?

Are the interpersonal needs (why people join a group) of the online group's members met?

Do you think online groups are more or less effective than face to face groups?

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### **Technology and Small Groups**

Recent advances in new communication technologies are not only changing how small groups interact, but are also redefining our notion of a small group. Although some organizations have used technology such as telephones and videoconferencing for some time, those communication tools are costly. New technologies, particularly the Internet, allow for asynchronous and synchronous communication among small group members at relatively low cost. These technologies are altering small group membership, functions, and processes.

#### **Research on Technology and Small Group Communication**

Most research on the use of technology in small group work compares groups that use communication technologies (such as discussion boards and videoconferencing) to those that meet face-to-face. With the rapid changes in communication technology, many problems associated with groups that do not meet face-to-face have been reduced or eliminated. Still, groups that never meet face-to-face can encounter difficult challenges. And yet, not meeting face-to-face also has its advantages.

New communication technologies can create new environments that produce more open, fluid, and dynamic small group environments. For example, recent research suggests that online discussions facilitate collaborative learning in the university classroom. One study found that students who are actively engaged in online discussion earned higher grades in large lecture class and felt that they learned more than students who did not participate. New communication technologies also have the potential to provide an avenue of participation for historically disadvantaged and disenfranchised group members.

Yet, new communication technologies can be costly, both in terms of time and money. Users who are unfamiliar with the technology and communication etiquette can become frustrated and discouraged. Computer software and hardware are expensive and need regular upgrades to keep up with the ever-changing world of new technology.

#### **Group Outcomes**

Several studies have found that groups interacting either synchronously (e.g., chat rooms, audio or video-conferencing) or asynchronously (discussion boards, listservs) produced higher quality decisions, unique solutions, and more creative ideas than face-to-face groups. Listservs, discussion boards, and chat rooms in particular tend to facilitate participation by all group members, thus improving their yield of ideas. For example, with asynchronous communication (listservs and discussion boards), group members have time to reflect on what others have posted, and contemplate responses. Also, some software allows for anonymity in computer-mediated interactions. Research in organizational decision making has found that this anonymity can produce better

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contributions to group problem solving and decision making.

However, other research has found that face-to-face groups out-perform groups that meet via mediated tools. Although mediated groups may develop a greater number of unique ideas, the final product is not always better. Group members do not always use the technology available, so the overall amount of interaction may be reduced. It can be easier for group members to avoid participating and contributing their fair share to task completion when group members do not meet face-to-face. Group members can simply delete emails, avoid the discussion board, or fail to attend a chat room meeting. The relative anonymity of mediated interactions can reduce group member loyalty and motivation.

Still, a lot of research has found no differences between face-to-face and mediated group decision making. Brainstorming, achieving consensus, and producing a quality report can be equally accomplished in both contexts.

### **Group Processes**

Several studies in the organizational context have demonstrated that groups using new communication technologies solve problems and reach decisions in significantly less time than face-to-face groups. In addition, group member participation tends to be greater and more equally distributed among members in mediated communication versus face-to-face interaction. Also, it is much easier for one or two group members to dominate the group in face-to-face discussion, whereas when communicating using technology such as listservs and discussion boards, lengthy posts can simply be deleted or ignored.

In contrast, studies conducted in the laboratory (often using zero-history groups) found that mediated group decision making is more time consuming and less satisfying than face-to-face meetings. Group members become frustrated with response-time delays when using asynchronous forms of communication. Mediated communication is seen as less personal and more open to misunderstandings. The history that organization members have is absent from laboratory groups. Thus, laboratory groups lack the context that an organization provides and common understandings associated with organizational practices and routines.

### Creativity in small groups

Creativity can be a positive result of small group work. Although we generally think of creativity as something that arises from individuals, creativity ultimately stems from social processes. In small group work, teamwork and collaboration are the foundation of creativity.

#### What is Creativity?

Early definitions defined creativity as an innate talent that allowed individuals to develop something completely and totally new. Recently, we've recognized that the creativity is enhanced when people work together on a project. As a social process, creativity involves communicating with others to develop alternative ideas and solutions to problems. Creativity requires "thinking outside the box" and taking viewpoints we don't ordinarily consider.

In small group work, we can observe different forms of creativity. For example, expressive creativity refers to individual group members' creative endeavors that may satisfy their own needs but don't necessarily help the group achieve its goals. In inventive creativity, group members offer unique solutions to a problem. Innovative creativity happens when group members examine an issue from an alternative viewpoint. The latter two clearly involve teamwork and collaboration.

#### Why Aren't Groups Creative?

The primary roadblocks in group creativity are: pressure to conform to group norms, inability or unwillingness to collaborate, a defensive communication climate, differences in group members' communication styles, and cultural norms.

1. Conforming to group norms. Without some conformity to group norms, groups would not be able to function. However, a preoccupation with group member conformity stifles creativity and encourages groupthink. When group members are overly concerned with following rules, innovation becomes difficult to achieve. Also, when group members prize unanimity instead of encouraging members to present differing perspectives, new ideas are unlikely to emerge.
2. Lack of collaboration. Competition among group members seldom leads to creative ideas because group members are more likely to keep information to themselves rather than share it. Competition also encourages group members to focus on themselves and their own agendas rather than the goals of the group. Often, group members lack the skills necessary to foster collaboration. By focusing on cooperation, group members are more likely to bring their ideas together and create something innovative (see also the section on teamwork in the Pragmatics module).
3. Defensive communication climate. When the characteristics of group communication include evaluation, control, strategizing (hidden agendas), certainty, and superiority, group members are interacting defensively. Such

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defensive communication leaves little room for new ideas. For example, if group member A says, "Let's try combining ideas B and C," and group member D says, "That will never work," a potentially useful idea will be lost. In addition, such critical evaluation will reduce the likelihood that group members will offer their ideas.

4. Differences in group members' communication styles. Some group members are more outspoken, extroverted, and vocal in their opinions, while other group members are more reserved, introverted, and hesitant to state their views. The more vocal group members often dominate group meetings, so only those members' ideas are heard. More reticent group members may have important information to add to the discussion, but can be intimidated by aggressive group members.
5. Cultural norms. Creativity and innovation arise when people see the world in unique ways. Cultural norms, values, and beliefs are so engrained that we find it difficult to do that. People who can see things from unique angles are typically viewed as non-conformists. Thus, innovators' ideas are often discredited. To facilitate creativity, we have to balance respect for cultural norms with appreciation for innovation and freedom of expression.

### **How Can Group Members Encourage Creativity?**

Groups become more creative when they develop norms that support creativity and innovative thinking. These are some norms groups can develop that promote creativity:

1. Embrace diversity. Group members should seek diverse perspectives and welcome the opportunity to listen to different views and approaches to problems. (see also the module on culture and small group communication)
2. Facilitate a supportive communication climate. Description, problem orientation, spontaneity, empathy, equality, and provisionalism are the hallmarks of a supportive communication climate.
3. Reward inventive and innovative creativity. Encourage group members who offer unique ideas and alternative viewpoints. Be cautious, however, of "stars" and "stage hogs" who promote themselves rather than address the group's goals.
4. Foster collaboration. In times of conflict, group members find it easier to avoid, accommodate, or compromise when their goals seem to be at odds. Groups that are committed to collaboration must be dedicated to discovering conflict solutions that everyone can agree on. Collaboration can be time consuming and frustrating, but generally results in innovative solutions to complex problems. (see the Teamwork section in the Pragmatics module)
5. Practice active listening. We can process what others say much faster than they can speak. Typically, we use that "in-between" time to think about what we want to say. In active listening, we use that time to ponder, interpret, and contemplate what others have said, before formulating our response.

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### **A Systematic Approach to Creativity**

Successful groups incorporate both innovation and routine in their interactions. Too much creativity can lead to chaos. Constant change leads to lack of direction, confusion, frustration, and reduced productivity. Too much stability leads to inflexibility, an inability to adapt, and a tendency to follow rules without questioning them.

Approaching creativity in a systematic way encourages group members to identify the purpose of their creative endeavors and provides discussion time dedicated to creativity. Thus, groups can integrate a format such as Standard Agenda with the creativity strategy outlined below.

### **A Creativity System**

1. Determine the purpose of the innovation. The group needs to answer the questions: What do we want to change? Why does it need to change?
2. Describe the features of the object or process that the group wishes to change. That is, list the object's materials and design or list the parts and steps necessary to complete the process.
3. Describe the functions of the object or process. Answer the question: What does this object/process do?
4. Brainstorm for alternative functions. What do we want this object/process to do?
5. Identify features necessary to fulfill alternative functions.

### **Class Activity**

As a group use the systematic approach to creativity to innovate a hammer and make it more useful.