

# Electric Maze™ User's Manual

Electric Maze Model EM-3

Sivasailam Thiagarajan  
with  
*Interel Associates*

Interel, Inc.  
140 Carl Street  
San Francisco, CA 94117



# Table Of Contents

Foreword by Richard Kimball, Ph.D. ....	i
The Electric Maze™: What, Why, And How? .....	1
How The Maze Functions As A Learning Tool .....	5
How To Set Up, Program, And Take Down The Maze ...	10
Starting The Action Learning Process .....	17
Linking The Maze Learning With Workplace Solutions .....	19
How To Customize and Design Maze Activities .....	22
What's Next? .....	29
Maze Activities .....	31



## Foreword by Richard Kimball, Ph.D.

Organizations are in the midst of a revolution of unprecedented proportion. Individuals, teams, and entire business units must examine their deeply rooted attitudes, beliefs, and practices and embrace change. The old topography of management has given way to a radically different landscape; it is an adventurous terrain, but it is virtually uncharted territory.

The world has gotten too complex, too turbulent, even tumultuous. It is difficult for any single individual to know the business path. Therefore, the imperative survival skill becomes *learn-how* rather than *know-how*. The Electric Maze™ is an action-learning tool by Interel which allows organizations to simultaneously deliver this message while practicing some of the new requisite team behaviors.

For organizations to survive, their rate of learning must be equal to or greater than the rate of change around them. As Alex De Aries of Royal Dutch Shell has said, “organizational learning has become the only sustainable form of competitive advantage in the 90’s.” Harvard professor, Shoshanna Zuboff, author of *In the Age of the Smart Machine*, argues “The 21st century company has to promote and nurture the capacity to improve and to innovate. That idea has radical implications. It means *learning* become the axial principle of organizations. It replaces control as the fundamental job of management.”

While it seems that no one disagrees with the basic concept of promoting “learning organizations,” few people have ideas, tools, or methodologies to help the executives and workforce create them. The tectonic plates of business reality have drastically shifted and forever altered the business topography. It makes perfect sense that our methods for conducting executive education must shift just as dramatically.

One of the most promising methods to implement this shift is action learning. Action learning is a relatively new but hot topic of conversation among human resource and executive education specialists. The leveraged notion of action learning is that organizations must work to improve each person's ability to learn from experience, to learn collaboratively, and to develop these skills while working *real* business issues in *real* time.

For example, the business may involve getting a cross-functional team to reduce the cycle time for a new satellite launch from nine months to six months. Or another example may involve a cross-functional team being charged with conducting research into the viability of the company's international expansion in opening a new manufacturing plant in Indonesia. They have four months to gather data, review it, and then deliver their recommendation to the CEO. Rather than just review case studies or abstract theory, the intent is for the company to act upon their decision.

Because teams like these play such a vital role in the success of a business, not only are we interested in how they reach decisions, but also what they learn about learning—and about themselves.

A growing number of companies are embracing action learning. As we learn about action learning, we are discovering that most executives are ill-prepared for the ambiguous terrain. Conditioned in functional, hierarchical decisionmaking, they don't have even the rudimentary team decisionmaking skills. If the \$35 million satellite launch project is the Super Bowl of executive decisionmaking, most teams need to have a season of spring practice and a few scrimmages to get prepared. It is in this preparatory arena that the Electric Maze™ is an invaluable action-learning tool. It provides a practice field where executive teams can build the foundation necessary for real-time business learning.

# The Electric Maze™: What, Why, And How?

## **What Is The Maze?**

The maze is a highly-motivating learning device that consists of a grid and a control module. The grid is a flexible carpeted mat that is divided into 48 squares. Each square has a pressure-sensitive switch. If the square is activated, and if someone steps on it, the maze alarm sounds. You can activate and deactivate any square on the maze with the control module.

The maze, and the other learning devices produced by Interel, can be thought of as learning hardware. Using a computer analogy, the maze can be programmed with learning software for different learning applications. This manual explains how to install, program, and take down the hardware, and it provides software for a variety of learning applications.

## **What Is The Maze Used For?**

You can use the maze for both individual and group development. The three T's of maze usage are **training**, **teambuilding**, and **testing**.

**Training** activities with the maze help participants to learn interpersonal principles and procedures. Learning through the maze permits participants to actually experience abstract concepts like leadership, trust, synergy, empowerment, and dependency. It also encourages participants to experiment with such procedures as collaborative planning, giving and receiving feedback, and resolving conflicts.

**Teambuilding** activities with the maze improve the performance, productivity, and cohesiveness of the team. In these activities, the team is given a challenge involving the maze. Team members attempt to achieve a goal (for example, *getting everyone across the maze*) within specific constraints (for example, *without talking to each other, without setting off the alarm, and within 10 minutes*). In the process, they try out various decisionmaking and communication strategies and learn about teamwork. Participants progress from defensiveness to trust and discover how the team can achieve more than a collection of individuals. Using the maze experience as a metaphor, team members identify and implement new strategies to improve their performance.

**Testing** activities with the maze involve the assessment of the strengths, weaknesses, preferences, and patterns of individuals and teams. Maze activities so intensely involve the participants that they are caught in the act of being themselves. By observing the behaviors of individuals, we can assess such variables as their leadership potential, problem-solving abilities, communication modes, and thinking styles. By observing the team as a whole, we can assess such variables as its cohesiveness, empowerment, relationship patterns, and cross-gender communication modes.

Obviously, the three T's of maze usage are interrelated with each other. For example, we cannot use a maze activity as a testing strategy without the participants learning more effective problem-solving strategies. Therefore, all maze activities provide experiential data that can be used for a variety of training, teambuilding, and testing purposes. This fact increases the versatility and the power of the hardware and the software.

**Why Use The  
Electric  
Maze™?**

The maze is an action-learning device that provides several benefits. Here is a partial list of these benefits from different perspectives.

- Participants**
- To the participants, the maze presents a totally absorbing activity. In general, they will act naturally and be less concerned with posing for other participants.
  - The maze provides a holistic experience. Participants think, feel, and act at the same time. It activates all avenues of learning.
  - Maze activities are fun and engrossing. Participants easily lose themselves in the activity and reach a relaxed state of learning.

- Facilitators**
- The maze is easy to set up.
  - Several maze activities are available to provide a variety of learning, team-building, and testing activities. The same maze activity can be repeated with the same team—and yet produce a novel experience just by easily reprogramming the maze pattern. This enables the team to evaluate its own growth.
  - The maze facilitates safe physical activity in an indoor setting. The only requirement is the availability of sufficient space (a 10- by 15-foot area).
  - Participants do not have to wear special clothing to use the maze.
  - Facilitators can easily explain the goals and procedures of maze learning activities.

- Designers**
- Designers can customize maze activities to suit local resources and constraints.
  - Designers can create appropriate activities to simulate or highlight different team-based principles and procedures. Activities on the maze provide analogies to various organizational processes.

## **Administrators**

- Compared to the benefits achieved, the maze is a cost-effective investment.
- With minimal care and attention, the maze will provide years of trouble-free use. We know of several organizations where the maze has been used for more than five years with thousands of participants.
- It is easy to maintain the maze. All you need to do is to replace the battery periodically.
- The maze does not involve major physical effort. It can be used for participants with limited physical abilities.

## **How To Use The Maze**

The remaining chapters of this book deal with how to use the maze effectively. Chapter 2 describes a typical maze activity. Chapter 3 deals with the mechanics of setting up and taking down the maze. Chapters 4 and 5 provide useful guidelines for the two important steps in using the maze: briefing the participants before the activity and debriefing them after. Chapter 6 presents several suggestions for customizing a maze activity to better suit your needs. Part 2 of the book provides detailed instructions for several different maze activities.

# How The Maze Functions As A Learning Tool

The best way to understand the Electric Maze™ is to actually participate in an activity. We will do the next best thing and let you vicariously participate in a maze activity.

## **Today's Assignment**

Your boss declares that you and 17 of your co-workers have become a self-directed work team. You have heard rumors that something like this was going to happen, but you hoped it would just be a passing fad. Obviously, your boss is serious, and she sends all of you to a full-day orientation session. Sue Maloney, a facilitator from the Human Resources Development Division, will conduct the session. You arrive at the session with a little anxiety and a lot of skepticism.

Inside the meeting room, you see a 6 by 8 foot carpet being unrolled. It looks like a rug with a square grid pattern. As you help yourself to some coffee and a high-cholesterol doughnut, you notice a box being plugged into the carpet. You comment to one of your colleagues that you hope they won't be administering electric shock therapy.

## **In The Beginning**

At 8:30, Sue Maloney gets everybody's attention. She explains that before discussing the principles and procedures related to self-directed work teams, you will participate in an icebreaking activity. She asks everybody to stand on one side of the carpet (which she calls the *electric maze*) and points out that it is a 6 x 8 grid with 48 squares. Each square has a pressure-sensitive sensor built into it.

Sue steps on one of the squares on the carpet and you hear an alarm sound. Sue explains that this alarm means she has stepped on a active square. When she steps on another square, nothing happens. This means she has stepped on a safe square.

Sue points to the nearest side of the maze and says that you will be trying to cross from this side to the opposite side. The goal for the group is to take turns and get everyone across the maze.

### **Rules And Regulations**

Sue lists some rules. Only one person may walk or stand on the maze at a time. You enter the maze by stepping on any square on the starting side. You must move one square at a time, horizontally, vertically, or diagonally. You cannot skip or jump over any squares. If the alarm sounds, you must backtrack exactly the same way you started, step off the maze, and let the next person try.

Sue continues with more rules. The activity will start with a 5-minute planning period, during which participants can talk to each other, but no one can step on the maze. After the planning period, participants will have 20 minutes to attempt to cross the maze. During this period, participants cannot talk to each other, nor write or draw anything.

### **Nobody Is In Charge**

Sue asks if there are any questions. You have none. She announces the start of the 5-minute planning period.

You look around to see if anyone wants to suggest anything. The group splits itself into two or three subgroups trying to discuss what they should be doing. Teresa is talking with three other employees, and you're not sure what they are talking about. Miguel says in a loud voice, "Let's elect a leader!" Unfortunately, everybody ignores him. Norm suggests that everybody should have a number so you can be sure each person takes a turn walking on the maze. Pat suggests that the group should draw a grid on a piece of paper to keep track of which squares make the alarm go off. Tracey reminds her that no one is permitted to write or draw anything. In the meantime, a small group of people tries to give a number to each square so they will be able to signal which squares are safe by using their fingers. You think this is a silly idea and suggest instead that everyone should be responsible for one row of squares on the maze. You are still trying to figure out how this system can work when Sue announces the end of the planning time.

## On The Maze

Once again you look blankly at each other, not knowing who should go first. People point to each other and eventually Kay steps on the closest square. It immediately sets off the alarm, forcing her to step off. Other people try different squares on the starting side, but they all seem to set off the alarm. Eventually, the next-to-last square turns out to be safe, and Sharon steps from that square to the next one straight ahead. No alarm goes off, so Sharon takes one more step. The alarm sounds immediately. Sharon, startled, jumps off the maze. Sue reminds her that anyone who sets off the alarm should backtrack and exit from the square where they started.

There are lots of hand signals and grunts as players step on the maze. Your group eventually discovers that the correct strategy is to take a diagonal step to the left after the first two rows. By this time you have (nonverbally) agreed on your hand signals. You have stopped repeating the same mistakes. Everyone seems to have completed their first turn, so Kay steps on the maze for her second try. Things progress slowly and some people are getting frustrated about not being able to talk. After some time, the group reaches the sixth row of the maze and has only two more rows to go. However, you run into a problem at this point, because the next three squares all beep. Eventually, Thelma takes a step to the left, and it turns out to be safe. However, your group gets stuck once again. Finally, you try stepping *back* diagonally to the left when it is your turn. This works. The group figures out that you have to go back two squares before you can advance again.

By this time Sue announces that you have only 2 minutes more. People look at her in disbelief. Joe returns to the maze, figures out the right path, and reaches the opposite edge. There is a loud cheer. Everyone else now wants to cross the maze. A couple of people point to the safe squares and direct traffic. Your group keeps encouraging everybody on, and when the last person crosses to the other side, you insist that Sue should also go across. You all feel good about what you have achieved.

**After The Crossing**

Sue gathers everybody around the maze. She says that the maze demonstrates some of the principles related to self-directed work teams. To learn from the maze activity, she wants everyone to discuss their experience. Everybody wants to talk at once. You suggest that if Sue had appointed a leader, the group could have crossed the maze in half the time. Sue says that while that might be true, you should be thinking in terms of self-directed work teams. She also says that she will get back to that particular point later. Right now, she wants to take your group through a systematic set of questions so you can share your insights with each other.

**Questions And More Questions**

Sue asks about your experiences during different stages of the activity. Some people complain about their frustration. Certain people seem to be more touchy than the others. Sue then asks what happened in the initial stages of the activity, and during the final stages. Different people report about their decisions and actions. You are surprised by some unusual perceptions Sharon seems to have. Sue's next question is whether anything similar happened to you in the workplace. Kay describes a situation in which no one wanted to take the responsibility for fixing the copier. Sue then asks several what-if questions including, "What if we had a leader?" Group members are divided on this question; several agree that a leader would have sped things up, while others believe that the leader would have slowed the learning process. Next, Sue states some general principles and asks whether you agree or disagree with them. For example, she proposes that stepping on an active square actually gives valuable information for future use. Some people insist that making the square beep is a mistake . . . .

**After Debriefing**

This discussion continues for a long time. Even when Sue declares a coffee break, people keep talking. You find yourself continuing the discussion with Joe during the break.

The rest of the day is devoted to developing principles and action items to support the team's effectiveness. You notice that the discussion is animated and that people make frequent references to the maze activity as a metaphor for the workplace.

# How To Set Up, Program, And Take Down The Maze

The Interel Electric Maze™ is a sturdy, reliable, user-friendly learning device. Used properly, it will give many years of reliable service.

Take some time to learn how to set up the maze and program it. This section will help you become familiar with the maze operations.

## **What are the components of the maze?**

The maze is a flexible, carpeted mat divided into 48 squares. There are six columns and eight rows. Each square of the maze has a pressure sensitive switch under it. If the square is programmed to be active, then an alarm sounds when someone steps on that square.

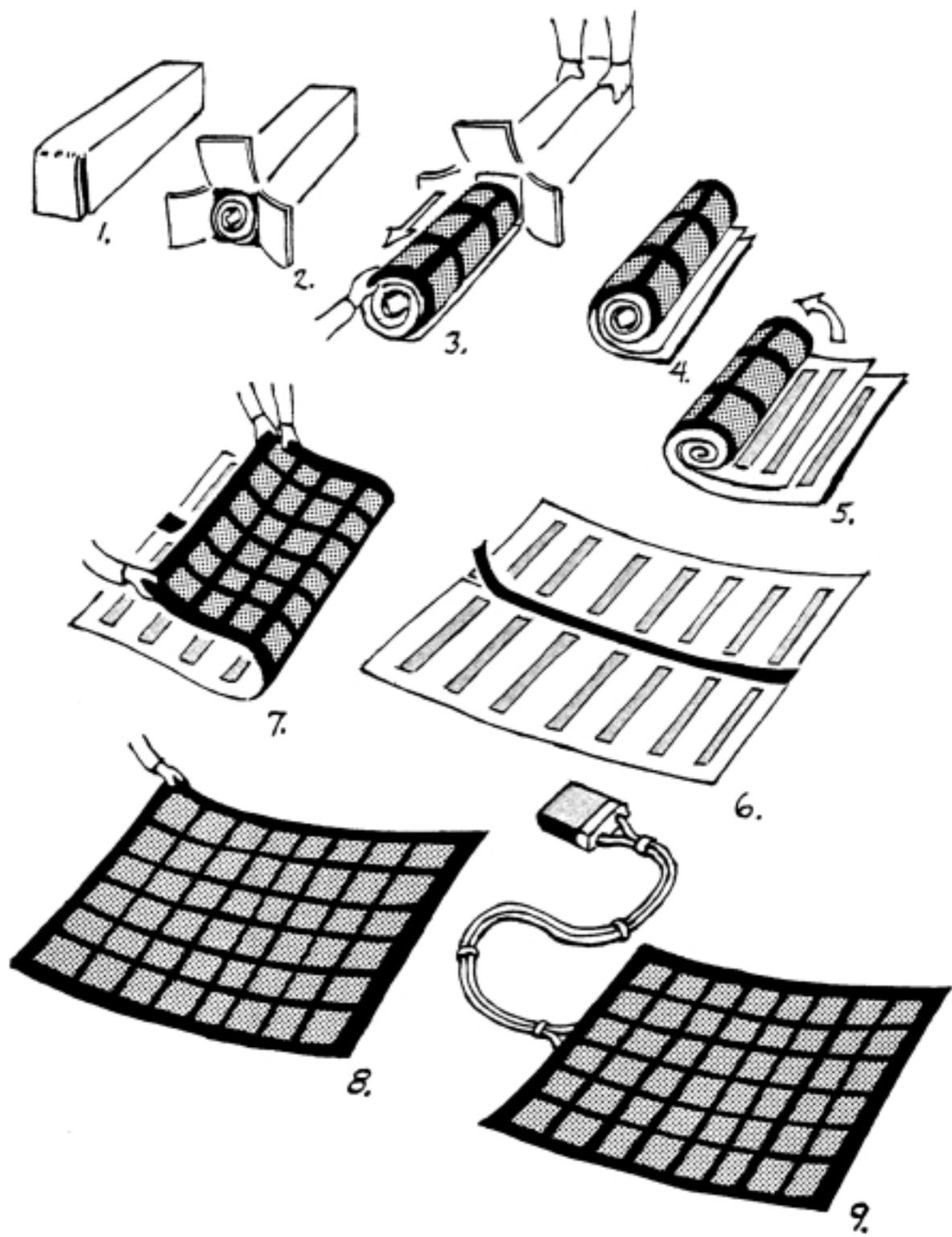
You can activate and deactivate any square by using the control module. This is a battery-operated programming unit that is attached to a cable from the maze.

## **How To Set Up The Maze**

To set up the Electric Maze™, remove the grid sections from their case and unroll them. Leave the two sections in an inverted (carpet face down) position next to each other with long sides parallel and control cables emerging from adjacent corners. Carefully align the sections so the edges touch but don't overlap. Apply the Velcro joining strip along the full length of the joined edges.

Holding the edge of the Electric Maze™ grid where the control cables are attached, pick it up and move it towards the opposite edge until the grid is loosely folded in half.

If there is enough room, keep moving the edge until the grid is right side up, with its carpet side showing. If the room does not have enough space after first folding the grid in half, walk to the folded edge and start to work the bottom out from under the top until the grid is flat and right side-up.



Remove the control module from its bag and plug the cables from the Electric Maze™ grid into the control module. The cables' end connectors and the control module's connectors are color coded with red and blue dots. Secure the cable connectors with their knurled screws to ensure proper electrical contact.

Lay the control cables alongside each other and bundle them using the Velcro tabs fixed to the the cables. This will keep the cables from underfoot during the activities.

### **How To Program The Maze**

The control module programming panel has 48 holes, arranged in a 6 x 8 configuration. Each of these holes corresponds to a square on the maze. You program the control module by inserting the blue pins into selected holes.

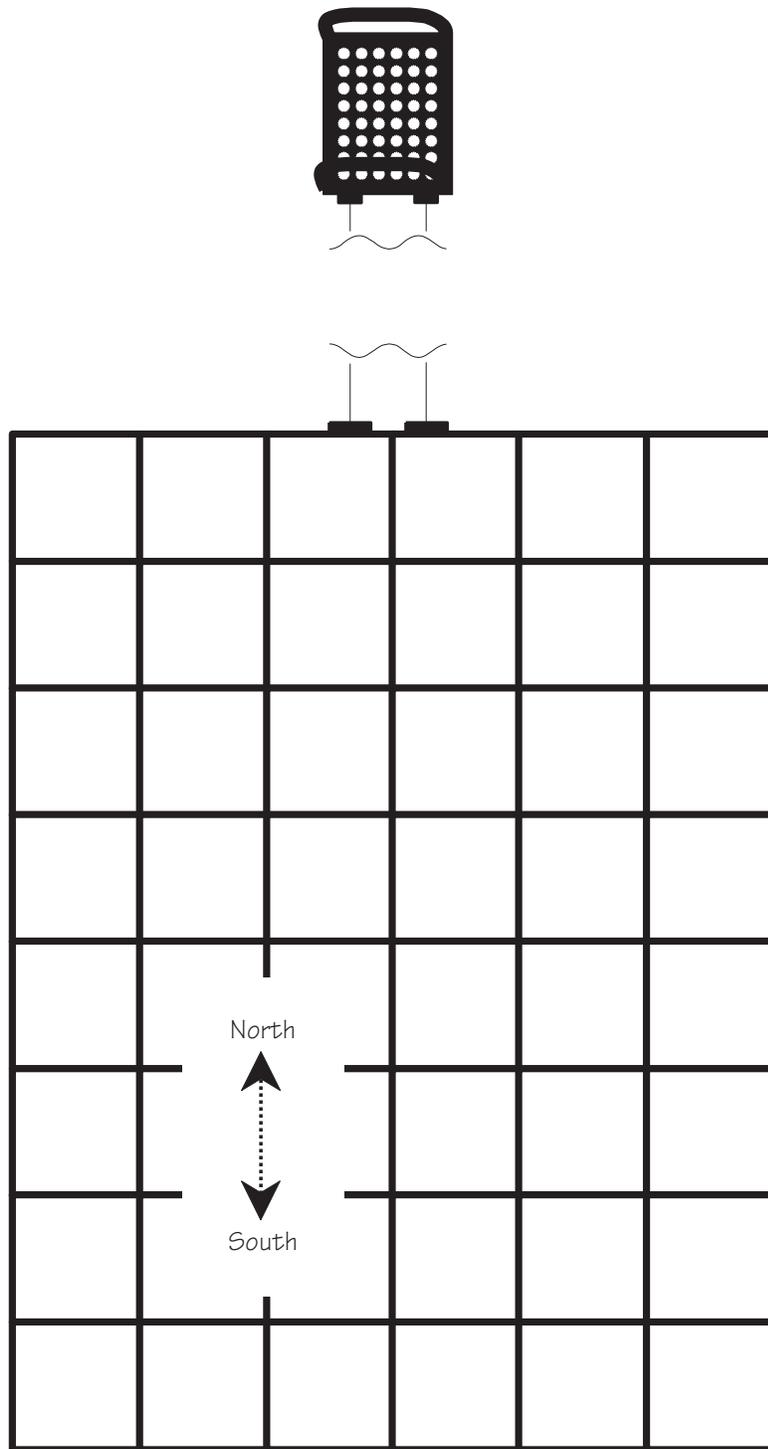
The side of the maze that has the cables coming out of it is referred to as the *North* side. The control box is set up so that the side connected to the cables corresponds to the *South* side of the maze. If you extend the control box as far as possible (face up) from the maze grid, the 48 panel holes on the control box will be oriented the same as the 48 corresponding squares on the maze.

The control module has two switches. The power switch lets you turn the maze on (by switching toward the red dot) or off (by switching away from the red dot). The other switch is the test switch. If it is toward the blue dot, the maze alarm will sound.

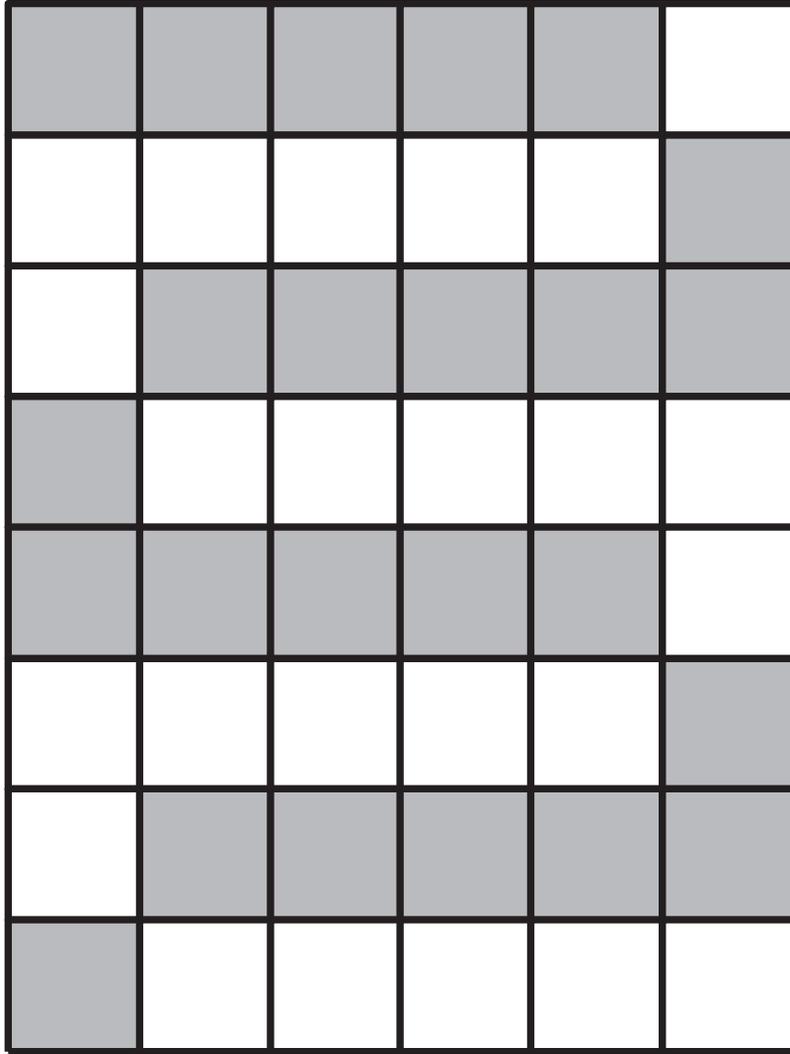
If someone steps on a square that does not have a blue pin in the corresponding hole, the maze alarm will sound. Try this by inserting pins into the holes that correspond with the white squares on the map on page 14. Then navigate the maze from the South end to the North end.

Try this map right now and make sure that everything works the way you expect.

Incidentally, when you are conducting a maze activity, place the control module with its pins facing down. This way, the participants cannot look at the pins and figure out the maze pattern.



Interrel Maze EM-3  
Grid & Control Module Orientation



*Test Pattern*

### **How To Take Down The Maze**

Turn the control module off. Separate the two control cables by undoing the Velcro bundling tabs. Disconnect the control module from the Electric Maze™ grid by first unscrewing the knurled screws on the cable connector bodies, then separating the connectors by gently pulling them straight apart. (A slight rocking motion is helpful.)

Turn the Electric Maze™ grid upside down so that the carpet side is facing down. Use the same folding technique that you used to set up the maze.

Remove the Velcro strip joining the two maze grid sections. Then slide one section over the other with all edges aligned.

Lay the control cables along the North end of the grid sections.

Roll the two grid sections around the control cable. Begin by rolling the edge to which the cables are attached into no less than a 5-inch diameter roll.

Place the rolled grids in their carrying case.

### **How To Take Care Of The Maze**

Always roll the grid along its long dimension. Never roll it along its short dimension.

Don't roll the maze too tightly. If you do that, or if you crease the maze, you may damage the pressure-sensitive switches.

Store and ship the maze only in its shipping container or carrying case.

Use the maze only indoors. Don't use it in direct sunlight or out of doors.

Avoid walking on the maze's outer edge (the four-inch-wide border).

Avoid running or jumping on the maze. Participants can wear normal work clothes including high-heeled shoes.

Use the maze only on smooth floors or low pile carpeting.

Vacuum the squares of the maze grid periodically.

Replace the 9-volt battery in the control module if the alarm is noticeably softer and pulses more rapidly, or if maze operation is erratic. Carry an extra battery just in case it gives out during your activity.

Be sure to turn the module power switch off or remove the battery when the maze is not in active use. When the control module is turned on, it draws a continuous current, which will completely drain the battery in 6 to 10 hours.

# Starting The Action Learning Process

The first few minutes you spend in introducing a maze activity are very important. During this period you can either confuse your participants or excite them. These guidelines are designed to help you do the latter.

During the introduction to a maze activity, you need to answer four questions. Here are the questions and some suggested points to cover during your initial briefing:

- |   |  |
|---|--|
| <b>What Is The Maze?</b>                        | Assemble the participants around the maze. Explain that some of the squares on the maze are activated. If a square is activated, and someone steps on it, then the maze alarm will sound. Demonstrate the alarm by first stepping on a safe square and then stepping on an activated square. Make sure that these are not critical squares! (Alternatively, tell participants that you will change the squares before the start of the maze activity.) |
| <b>What Is The Goal?</b>                        | Basic maze activities have this goal: Within a specific time limit, participants should cross the maze from any square on one of its narrower sides to any square on the opposite side—without setting off the alarm.  |
| <b>How Do People Move On The Maze?</b>          | You walk across the maze, one square at a time. You can move one square horizontally, vertically or diagonally. You cannot skip a square or jump across squares. In most of the activities in this manual, only one person is permitted to be on the maze at any given time.   |
| <b>What Happens When The Maze Alarm Sounds?</b> | If you set off the alarm, you should return to the previous square. From there, you should backtrack and leave the maze from the square where you started. You must retrace the exact path without stepping on new squares and setting off the alarm again.  |

These are the standard instructions for the maze. If a particular activity described in this book requires a change from this procedure, it will be clearly specified.

# Linking Maze Learning With Workplace Solutions

The maze is an experiential learning device. Maze activities provide intense, interesting, and valuable experiences. People achieve effective learning by *reflecting* on these experiences. To ensure such learning, it is important for you to conduct a *debriefing* session.

Debriefing is an activity that helps participants reflect on their experiences, discover useful insights, and share them with each other. Without debriefing, participants in an activity may have a good time but not learn anything. In some situations, they may become confused, frustrated, or upset. Further, debriefing multiplies learning insights by encouraging participants to share their personal discoveries with each other. Therefore, it is important for you to set aside ample time for debriefing after each maze activity.

Our experiences with maze activities suggests that a structured approach to debriefing is more effective than an unstructured discussion. The most effective structure for debriefing will vary depending on the type of participants, the culture of the organization, and the nature of desired learning outcomes. However, the basic structure should include these three phases: observation, interpretation, and application.

## Three Phases of Debriefing

**Observation: What happened?** The purpose of this phase is to review the maze activity and to share different perceptions. Begin with an open-ended question such as “What interesting things happened during the maze activity?” Follow this with a review of decisions, actions, and results during each step of the activity. During the discussion, encourage participants identify patterns, similarities, and differences among their experiences.

**Interpretation: Why did it happen?** The purpose of this phase is to make sense out of observations. To do this, come up with hypotheses that suggests cause-effect relationships between different behaviors and outcomes. Ask the participants to offer evidence from the maze activity (and from their workplace experiences) to support or to reject each hypothesis.

**Application: How can we apply what we learned?** The purpose of this phase is to encourage participants to develop effective strategies for future use. This is the critical phase for linking the maze learning with workplace solutions. Begin this phase with the question, “How would you apply the learning insights from the maze activity to solving your workplace problems?”

### **Two More Phases**

In addition to the three phases above, you may sometimes want to highlight the parallels between what happened during the maze activity and what happens in the workplace. You may also encourage the participants to make predictions about other situations. Here are two additional phases which can be incorporated in the debriefing structure:

**Speculation: What if—?** The purpose of this phase is to go beyond the limited data from a single maze activity to alternative conditions. Start the discussions with a series of what-if questions such as, “What if we had twice as many team members?” or “What if the winner received \$2000?” Encourage the participants to speculate on possible outcomes based on their experiences in the maze activity—and in the workplace.

**Correlation: What are the parallels?** The purpose of this phase is to relate the maze activity to the workplace. Begin with the open-ended question, “How did your experiences during the maze activity remind you of similar experiences in your workplace?” Follow up with questions that attempt to relate the process, rules, constraints, and components of the maze activity to their analogues in the workplace. Then ask questions to relate each of the hypotheses generated in the interpretation phase to the participants’ workplace experiences.

**Five Phase Debriefing**

Each of the maze activities described in the second part of the book concludes with a series of debriefing questions related to the five phases and organized in this sequence:

- Observation
- Interpretation
- Speculation
- Correlation
- Application

**The Importance Of Being Flexible**

The questions are just a set of suggestions. Feel free to ignore or modify any of them and to add new ones to suit your special needs. The sequence is an effective and convenient arrangement. In the real world, spontaneous comments from the participants may direct the discussion along certain channels. It is important for you to go with the flow as long as the discussion generates learning insights. You can always return to your list of phases and questions as a convenient checklist to ensure that you have covered all important topics.

# How To Customize and Design Maze Activities

The design of a maze activity—just as the design of any simulation—is a complex and time consuming task. This chapter is not intended to make you an expert simulation designer. But it gives you several suggestions for customizing and modifying the maze activities in the second part of the book to better suit your special needs.

## **Begin With A Learning Point**

Whether you are designing a new maze activity or customizing an existing one, you should begin by identifying and focusing on one or two primary learning points, topics, or objectives. Without this focus, it is easy to get carried away and design an exciting activity—which does not contribute to training, testing, or team building.

Here are the learning topics for the five maze activities described in the second part of the book:

- 24 MINUTES: Planning and problem solving
- DOUBLE CROSS: Teams within an organization
- MENTORS: Learning versus performance
- MEMOS: Empowerment
- INFO SALE: Individual and team achievement

To help in your choice of appropriate learning objectives, here is a list of team concepts, principles, and procedures for which we have designed maze activities at one time or another:

- Change Management
- Communication
- Conflict resolution
- Cross functional teams
- Cultural diversity in teams

- Establishing groundrules
- Evaluating team performance
- Giving and receiving feedback
- Improving the level of trust
- Integrating new members in a team
- Leadership
- Limitations of teams
- Mission, goals, and objectives
- Roles and responsibilities
- Stages in team development
- Team effectiveness factors
- Team membership
- Types of teams

**Flexible Design** Once you have a clear focus on the desirable learning point or objective, you can then critically examine alternatives for various elements of the maze activity and select the most appropriate combination. To help you in this task, the rest of this chapter identifies different elements of a maze activity and suggests alternatives.

**Goal** The goal for the maze activity should be related to the learning point and objective, but should be stated in terms of the maze-crossing. Here are some alternative goals you may set up for a maze activity:

- Cross the maze from one side to the other and return to the starting side using a different route.
- Cross the maze from one side to the other.
- Cross the maze from one specific square on one side to another specific square on the other side.
- Cross the maze twice while the pattern of the maze changes without warning.

- Locate all unsafe squares on the maze.
- Locate the one square in the maze which contains a treasure (indicated by the alarm).
- Travel from any square on the side to a square in the center of the maze.

### Score Keeping

You may want to create a scoring system to reflect the participants' activity on the maze. Here are some suggestions about score keeping alternatives:

- **Money.** You can use play money to keep track of a team's successes and failures. The team may begin with a capital of a million dollars and a time limit of 15 minutes. For every minute by which the team beats the deadline, it earns an extra \$10,000. For every minute of delay, the team loses \$20,000. The team also pays a \$5,000 penalty every time someone sets off the alarm needlessly.
- **Tokens.** You can use poker chips or some other tokens to keep teams under control.. Each team member begins with several tokens. Every time a participant sets off the alarm by stepping on a square that has been previously identified as an active one, he or she pays a token. A token is also collected from any participant who talks during the maze-crossing activity. Participants who lose all of their tokens may not be on the maze grid.
- **Speed.** The team's score depends on how quickly all the members of the maze cross the maze without setting off the alarm.
- **Satisfaction.** You can measure a team's performance in terms of the satisfaction of its members. Use a short questionnaire to measure member's satisfaction associated with different factors.
- **External rating.** You can use outside observers to watch the teams' activities and to rate its performance in terms of such factors as member participation and number of strategies generated.

### **Maze Crossing Procedure**

You can modify the procedure for crossing the maze to reflect various learning points. Here are some alternatives:

- Participants may or may not move diagonally on the maze.
- Only one person may step on the maze at any given time.
- Two or more people may step on the maze at any given time.
- Several people can cross the maze, but only after a correct path is identified.
- When the alarm sounds, you may require the participant to backtrack the route and step off the maze from the starting square. Or you may ask the participant to step off the maze immediately. Or you may permit the participant to move on the maze until he or she sets off the alarms in two different squares.
- You may impose a penalty for setting off the alarm. To encourage sensible risk taking, you may impose a penalty only if a person steps on a square which has been previously identified as an active one.

### **Communication**

Usually participants are not permitted to communicate with each other while crossing the maze. You may change the rules related to communication procedures to emphasize your learning point. Here are some alternatives:

- Participants may talk to each other.
- Participants may talk to each other, but use a limited vocabulary of eight words supplied to them by the facilitator.
- Participants may talk to each other using a limited vocabulary they create during the planning period.
- Participants may talk to each other, but only use numbers.
- Participants may write memos to each other, but may not use any graphics.

**Maze Pattern**

As you experiment with different ways to program the maze, you may discover several interesting routes. The best way to do this is to reproduce the blank maze grids in the back of the book and to mark the safe squares:

- The maze has only one safe route.
- The maze has two or more safe routes.
- The maze has no safe routes (but the participants are not told this).
- The safe route can be obvious: a straight line from one side to the other.
- The safe route may be devious: It may require going back in order to advance.
- The maze has no blind alleys.
- The maze has several blind alleys.
- All squares on the first two rows are all safe—to initially encourage the participants.
- Only two squares on the first two rows are safe—to initially discourage the participants.
- The route is reprogrammed in the middle of the maze crossing activity to reflect continuously changing conditions.

**Schedule**

You can have short or long time limits to reflect tight or generous deadlines:

- Time for initial planning may vary from 0 to 30 minutes.
- Time for crossing the maze may vary from 5 to 30 minutes.
- You can give a single time limit for both planning and crossing the maze.
- You can give 5 to 10 minute review and revision periods in the midst of maze crossing time.
- There are no time limits. Teams may take as much time as necessary.

**Participants** We have used groups from three to 30 on the maze. You can organize the participants in several different ways:

- All participants belong to the same team.
- You can have two teams of equal size, but not indicate whether they are supposed to compete or cooperate with each others.
- You can have two teams that compete with each other.
- You can have two teams of unequal sizes.
- You can have each participant act independently.
- You can assign different roles to different participants. For example, you can have the roles of managers, facilitators, consultants, workers, trainers, change agents, inspectors, and observers.

**Debriefing** We have described several phases and suggested several questions for debriefing. We have also stressed the need for flexibility in the debriefing sequence. Here are some alternative approaches for conducting the debriefing session:

- You may conduct the debriefing immediately at the end of the maze activity. This makes use of the participants' excitement and enthusiasm.
- You may delay the debriefing with a coffee break after the activity. This enables the participants to collect their thoughts.
- You may insert mini-debriefing sessions once every 15 minutes during the maze activity. This enables the participants to review their progress and give feedback to each other.
- You may delay the debriefing for the next day or the next week. This enables the participants to reflect and become more objective.
- You may combine intermediate, immediate, and delayed debriefing procedures to suit your needs.
- You may debrief the participants individually by using a debriefing questionnaire.

- You may also conduct an individualized debriefing by asking participants to write a personal journal entry about their experiences.
- You may try partnership debriefing by asking participants to find a partner and interview each other.
- You may organize the participants into small groups and have them discuss various debriefing questions within the group.
- You may use an audiotape recording to ask questions and to give instructions to the participants during debriefing.
- You may record participants' activities on videotape and replay excerpts during the debriefing to initiate interesting discussions.

**Conclusion** The second part of this book describes five different activities illustrating a variety of maze elements. Initially, you may want to use them in the standard form, just to get a feel for the types of activities. Later, we encourage you to experiment with each activity by varying several elements according to the suggestions in this chapter. The maze is designed to be a flexible active learning device. So feel free to innovate!

# What Next?

## **A Suggested Action Plan**

If you are a newcomer to the Electric Maze™, here are some suggestions for learning how to use it to your maximum advantage:

- Read the first activity (called 24 MINUTES), set up the maze, invite your associates, and try out the activity to see how it plays out.
- Review the earlier chapters on setting up, starting, and debriefing. Incorporate the principles in planning for conducting 24 MINUTES with a real group.
- Work with a co-facilitator when you conduct a maze activity for the first time. Your co-facilitator need not be experienced with the maze, but should be able to reliably carry out the tasks assigned to him or her. Ask the co-facilitator to handle the maze mechanics while you concentrate on responding to the participants' needs.
- After conducting your maze activity, debrief yourself to discover your strengths and weaknesses. Build on your strengths to reduce your weaknesses.
- Before, during, and after conducting a maze activity, come up with ideas for customizing it. Make a note of these ideas.
- Once you have mastered 24 MINUTES, read the synopses of the other activities described in Part 2 and select the one which is the most useful to your needs. Repeat the process of reading the description, trying out the activity with your friends, conducting the activity (perhaps with a co-facilitator), debriefing yourself, and customizing the activity.

## **How May We Help You?**

We at Interel, Inc., the manufacturer of the Electric Maze™ support our customers in several ways:

- We plan to add field-tested software to the collection described in the second part of this book. You can add these new activities to your binder.
- We have experienced facilitators who can train people from your organization to use the maze as a flexible action learning device or to conduct specific maze activities.
- We have experienced designers who can assist you in the custom design of maze activities that suit your local needs, constraints, and resources. They can also design maze activities according to your specifications.

In addition to the Electric Maze™, we have several other action learning devices to assist you in your training, teambuilding, and testing needs.

For more information, write to Interel, Inc., 140 Carl Street, San Francisco, CA 94117 or call Boyd Watkins at (415) 566-0554.

# Maze Activities

The following pages contain instructions for conducting these learning activities on the Electric Maze™:

- 24 MINUTES
- DOUBLE CROSS
- MENTORS
- MEMOS
- INFO SALE

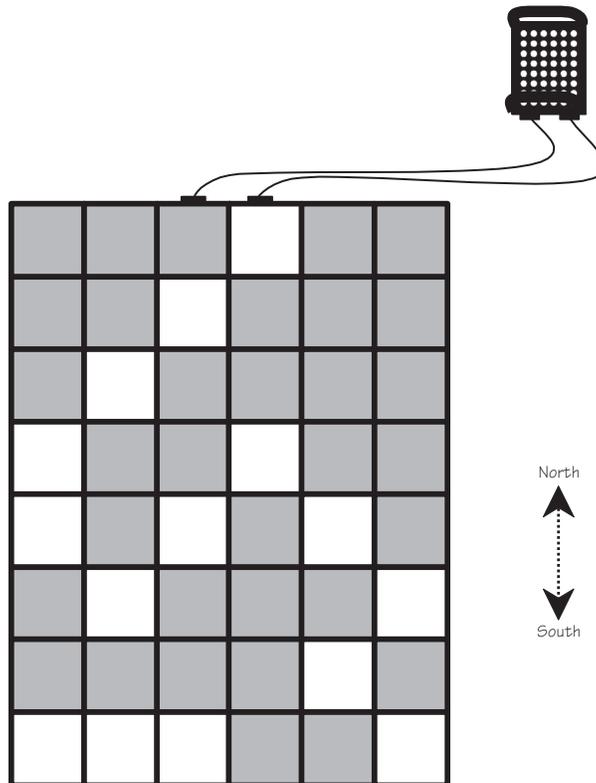
For convenience of use, each activity is given separate page numbers.



# 24 MINUTES

- Synopsis** Participants must get everyone across the maze without sounding the alarm. They have a total of 24 minutes, which they can spend either discussing strategy or silently crossing the maze. But they may not do both of these activities at the same time.
- Purpose** To explore factors related to effective planning, problem solving, decision making, and communication within teams.
- Participants** 5 to 30.
- Time** 1 hour (5 minutes for briefing, 24 minutes for the activity, and 30 minutes for debriefing)
- Supplies**
- Maze
  - Timer (for keeping track of the total time spent)
  - 3-minute timer (for keeping track of the minimum talk/walk time)
  - Flipchart (for use during debriefing)

**Setting Up** Set up the maze with this pattern. Safe squares are marked in white. Put pins in holes corresponding to white squares.



Put a pin in each WHITE square.

**Briefing** Provide the standard introduction to the maze (page 17).

**Specify the goal.** All members of the team should walk across the maze from any cell on the southern border to any cell on the northern border.

**Specify the time limit.** The team has 24 minutes to complete the task.

**Explain additional constraints.**

- Only one person can be on the maze at a time.
- Participants cannot enter the maze for their second try until everyone has completed his or her first try.

- If the alarm goes off, the participant should get off the maze, backtracking his or her path.
- Team members cannot use any writing materials.

**Introduce the talk or walk rule.** The facilitator will start the timer immediately after completing the briefing. Team members can either talk to each other or walk across the maze, but not both at the same time. When someone is on the maze, no one may talk. If team members want to talk, then no one may be on the maze. Once the team has begun either of these activities, it has to spend a minimum of 3 minutes with the activity before changing to the other activity.

**Facilitation** Answer questions from participants.

Announce the beginning of the activity. Start the timer.

Ask the team to begin with a planning discussion, which should last for at least 3 minutes. Start the 3-minute timer to enforce the minimum time rule. The team cannot be on the maze before 3 minutes have elapsed. But they can continue their discussion for as long they want to beyond the 3 minutes.

When the team decides to walk across the maze, start the 3-minute timer again. Remind the players that they cannot talk for at least the next 3 minutes. Even after that time, they cannot talk if someone is on the maze.

If anyone talks before 3 minutes, ask that person not to talk. If anyone talks after 3 minutes, start the timer and tell them they cannot be on the maze for at least the next 3 minutes.

Monitor the team's talking and walking behavior.

Once every 5 minutes, announce the time left in the 24-minute period.

If anyone steps on an active square and sounds the alarm, ask the person to return to the original square. Make sure the person retraces the path exactly.

**Ending The Activity** The team *wins* if everyone crosses the maze within 24 minutes. Congratulate the team and lead the participants in a round of applause.

The team *loses* if one or more of them still have not crossed the maze after 24 minutes. Stop the activity. Show the correct path and let everyone cross the maze.

**Debriefing** Here are suggested questions for use within the five-phase debriefing structure:

- Observation**
- What were your experiences at the beginning of the activity?
  - What were your experiences at the end of the activity?
  - What were your experiences during the planning process?
  - During the planning period, what strategies did people suggest?
  - Which strategies were implemented? Which ones were discarded?
  - What were your experiences during the crossing of the maze?
  - What were your thoughts when someone stepped on an active square?
  - What were your thoughts when the first person successfully crossed the maze?
  - What were your experiences with other team members?
  - Who were the leaders and major contributors during the activity?
  - Who were the nonparticipants and skeptics?

**Interpretation** State the following hypotheses and ask if the participants agree or disagree with each. Ask them to provide supporting data from the maze activity and from the workplace.

- Sounding the alarm when you step on an active square gives useful information. Yet most people feel embarrassed or guilty when this happens.
- People tend to plan too much.
- When you run out of time, you ignore planning.
- Effective planning involves a combination of trial-and-error experimentation and discussion.
- It is important to have a structure for the planning process.
- When confronted with a novel task, people ignore such strategies as process mapping.
- Without a leader, most groups flounder.
- Participants hesitate to empower themselves to make suggestions.
- You cannot plan efficiently when there are too many people involved.
- Not being able to talk to each other while walking on the maze makes it difficult for the team to succeed.
- Not being able to use paper and pencil makes it difficult for the team to succeed.
- Sometimes people worry so much about making fools of themselves that they are unable to focus on the task.
- Requiring everyone to cross the maze penalizes the smarter and faster participants.
- A few slow (or unmotivated) team members hold back the entire team.

- Speculation** What if—
- you were permitted to talk throughout the activity?
  - you were permitted to use paper and pencil?
  - you need not take turns?
  - you were fined \$10 every time there was a beep?
  - you were given \$10 for every minute you saved in the 24-minute allotment?
  - you were assigned roles of a manager, assistant managers, and employees?
  - one of you was initially identified as the leader initially?
  - there were no planning periods and no talking?
  - you had only 10 minutes to cross the maze?
  - you had 2 hours to cross the maze?
  - you had only an initial planning period—after which nobody was permitted to talk?
  - a few members had participated in the same activity earlier?
  - there were twice as many participants?
  - there were only three participants?

- Correlation** ■ What experiences during the maze activity remind you of similar experiences in your workplace?

Follow up with specific questions related to each of the hypotheses discussed during the previous phase.

- Application** Begin with these general questions:
- If we conducted the same maze activity again (but with a different maze pattern), how would you behave differently—knowing what you know now?
  - Using the maze activity as a metaphor, how would you change your team planning, problem solving, and decisionmaking behaviors in the workplace?

- How would you apply the learning insights from the maze activity to solving your workplace problems?

Follow up by repeating each of the hypotheses from the interpretation phase and asking this question:

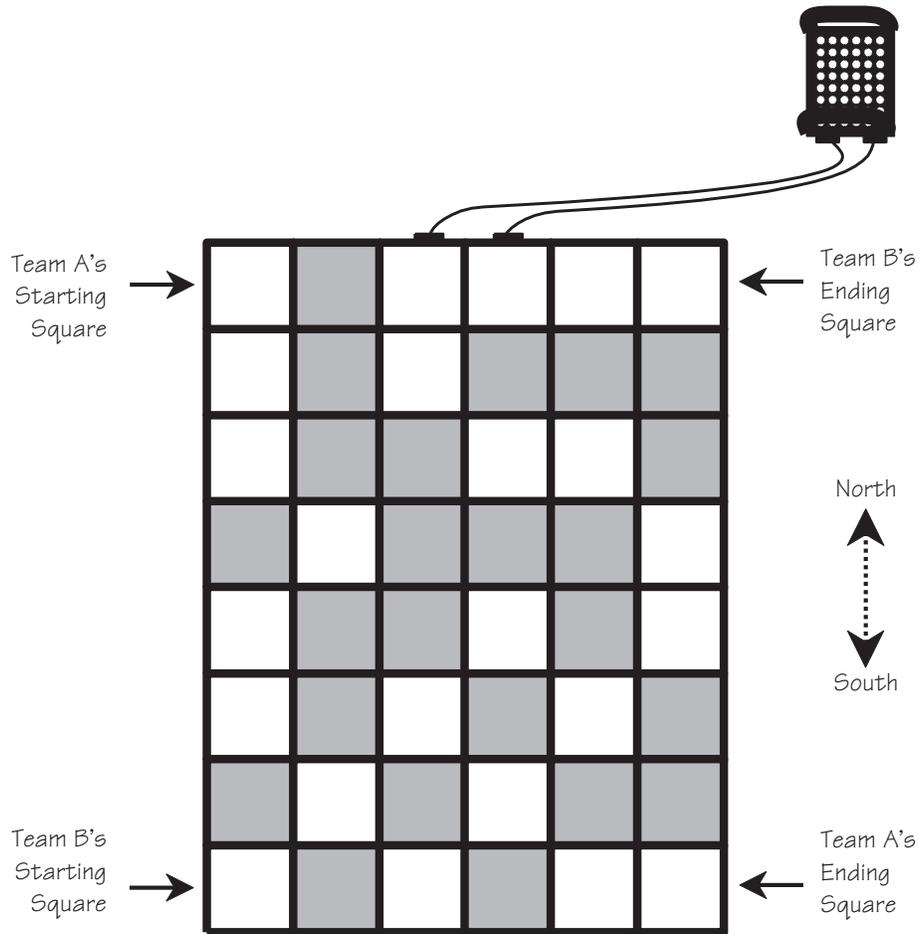
- How can this principle be used to improve productivity and performance in the workplace?



# DOUBLE CROSS

- Synopsis** Two teams begin at different corners of the maze and attempt to cross to the opposite corner. Teams assume that they are competing with each other, even though they are not told this. One team has an easier path than the other—and this leads to interesting results.
- Purpose** To explore what happens when two teams are engaged in similar activities—and what assumptions these teams make about cooperation and competition.
- Participants** 8 to 30 participants divided into two approximately equal teams.
- Time** 45 minutes (5 minutes for briefing, 25 minutes for the activity, and 15 minutes for debriefing)
- Supplies**
- Maze
  - Timer
  - Flipchart (for use during debriefing)

**Setup** Set up the maze with the following pattern. Safe squares are marked in white:



Put a pin in each WHITE square.

**Briefing** Assign participants to teams. Divide them into two teams of approximately equal size.

Provide the standard briefing (page 17).

**Specify the goal.** Assign each team to a different starting square. Explain that the teams are to find a safe path to the square at the diagonally opposite corner.

**Specify the time limit.** The teams have 25 minutes to complete their task.

**Explain additional constraints.** Only one person from each team can be on the maze at a time. Participants cannot enter the maze for their second try until everyone in their team has completed his or her first try. If the alarm goes off, the participant should retrace the path and get off the maze. Participants may not use writing materials.

**Explain talk or walk rule.** Both teams can spend *up to* 5 minutes to talk among themselves. During this planning period, no member of the team may step on the maze. After 5 minutes, or after a participant steps on the maze, participants (the team) may not talk until the activity is completed.

**Facilitation** Answer questions from participants. Announce the beginning of the activity and start the timer.

If any participant steps on the maze, remind members of the team that they may not talk to each other. At the end of 5 minutes, tell the team (or teams) that they may not talk until the activity is completed.

If the alarm goes off, identify the person who set it off. Ask him or her to retrace the path, return to the starting square, and get off the maze. If it is not clear which of two participants on the maze set off the alarm, ask both of them to return to their previous squares and step on the next square, one at a time.

**Team transfers.** After 10 minutes, briefly stop the activity and transfer a participant from one team to the other. Explain that this is due to a reorganization in the corporation.

**Talk break.** After 12 minutes, stop the activity again. Tell the participants that they have 3 minutes to talk among themselves. During this talk break, stop the timer and make sure no participant steps on the maze. Do not discourage discussions among members of different teams.

**First crossing.** It is very likely that one of the teams will cross the maze ahead of the other. When this happens, congratulate that team. Ask the members to move away from the maze and talk among themselves. Announce the time and encourage the other team to continue their activity.

**Ending The Activity** If the other team also crosses the maze before 25 minutes, congratulate its members. If time runs out before the team succeeds, show the correct path and let everyone cross the maze.

**Debriefing** Here are suggested questions for use within the five-phase debriefing structure:

- Observation**
- What were your experiences at the beginning of the activity?
  - What were your experiences at the end of the activity?
  - What were your experiences during the planning process?
  - During the planning process, what strategies did people suggest?
  - Which strategies were implemented? Which ones were discarded?
  - What happened during the crossing activity?
  - What were your thoughts when someone in your team stepped on an active square?
  - How did your team behave towards the other team?
  - What happened after a participant was transferred?
  - What happened during the talk break?
  - What were your thoughts when the first person successfully crossed the maze?
  - What happened when the other team found their way before your team did?
  - What happened in the other team that was different from what happened in your team?

- Interpretation**
- State the following hypotheses and ask if the participants agree or disagree with each. Ask them to provide supporting data from the maze activity and from the workplace.
  - The presence of another team increases your team's motivation.
  - Participants from the two teams compete against each other, even though they were not told to do so.
  - When the other team succeeds before your team, you assume that they had an easier task.
  - People in the slower team feel that they were given a tougher task.
  - The participant who is transferred from one team to the other feels uncomfortable. Team members also feel uncomfortable about accommodating a transferred participant.
  - Members of one team don't talk to members of the other team.

- Speculation** What if —
- the facilitator presented this as a cooperative activity: both teams lost unless all participants crossed over to the opposite square?
  - participants selected the team they wanted to join?
  - one team was given 10 minutes to complete the task while the other team was given 25 minutes?
  - the teams had to take turns walking on the maze?
  - the tasks were of the same level of difficulty?
  - the two paths were mirror images of each other?
  - the two teams started from diagonally opposite corners?
  - four teams had to cross the maze, using different paths?
  - team members were permitted to talk to each other at all times?

- one team had several more members than the other?
- members of one team were all men while the members of the other team were all women?
- the two teams consisted of employees from two different departments?

**Correlation** ■ What experiences during this activity remind you of similar experiences in your workplace?

Follow up with specific questions related to each of the questions discussed in the previous phase.

**Application** Begin with these general questions:

- If we conducted the same activity again (with different patterns), how would you behave differently — knowing what you know now?
- Using the maze activity as a metaphor, how would you change your behavior in the workplace?
- How would you apply the learning insights from the maze activity to solving your workplace problems?

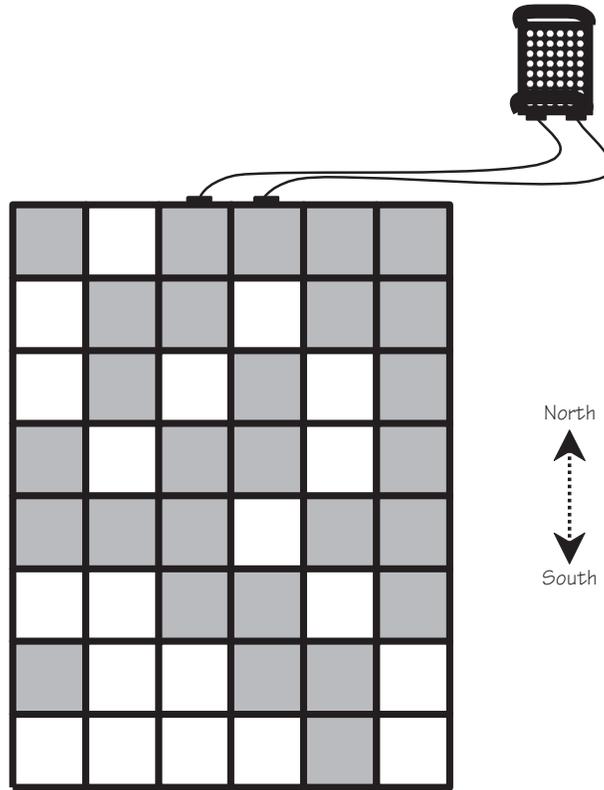
Follow up by repeating hypotheses from The interpretation phase and asking this question:

- How can this principle be used to improve productivity and performance in the workplace?

# MENTORS

- Synopsis** Participants form two teams. The first team learns how to cross the maze while the second team meets in another room. The first team then goes to the meeting room and teaches the second team how to cross the maze (without actually showing them the maze). While this training is taking place, the facilitator secretly changes the maze pattern. The second team attempts to implement what it has learned—only to confront a situation unlike their training.
- Purpose** To explore the relationship between managers and implementors, to highlight the difference between directives and directions, and to stress the advantages of training people to solve problems rather than giving them the correct solution.
- Participants** 10 to 30, divided into two teams.
- Time** 60 minutes (5 minutes for briefing managers, 15 minutes for manager's activity, 5 minutes for briefing workers, 15 minutes for worker's activity, and 20 minutes for debriefing)
- Supplies**
- Maze
  - Paper and pencil (for use by managers)
  - Timer (for keeping track of the total time spent)
  - Flipchart and markers

**Setup** Set up a room (the meeting room) with chairs for all participants. Place the flipchart in this room. Set up the maze in another room (the maze room), using this pattern. Safe squares are marked in white:



Put a pin in each WHITE square.

**Briefing** Gather all participants in the meeting room. Divide them into a smaller management team and a larger worker's team. Ask the workers to brainstorm a list of ideas on how managers should delegate tasks and responsibilities to workers. Then, take the managers to the maze room.

**Provide the standard introduction** to the maze (page 17).

**Specify the goal.** Tell the managers that they have two goals:

1. To discover a safe path from the southern edge of the maze to the northern edge.
2. To train the workers to cross the maze without talking.

**Specify the time limit.** The management team has 20 minutes to accomplish their goals. They may not talk to the workers during the first 5 minutes of this period or after 20 minutes have elapsed. During the last 5 minutes of this period, all managers should be in the meeting room, briefing and training the workers. After the managers complete their task, the workers have 15 minutes to complete their task.

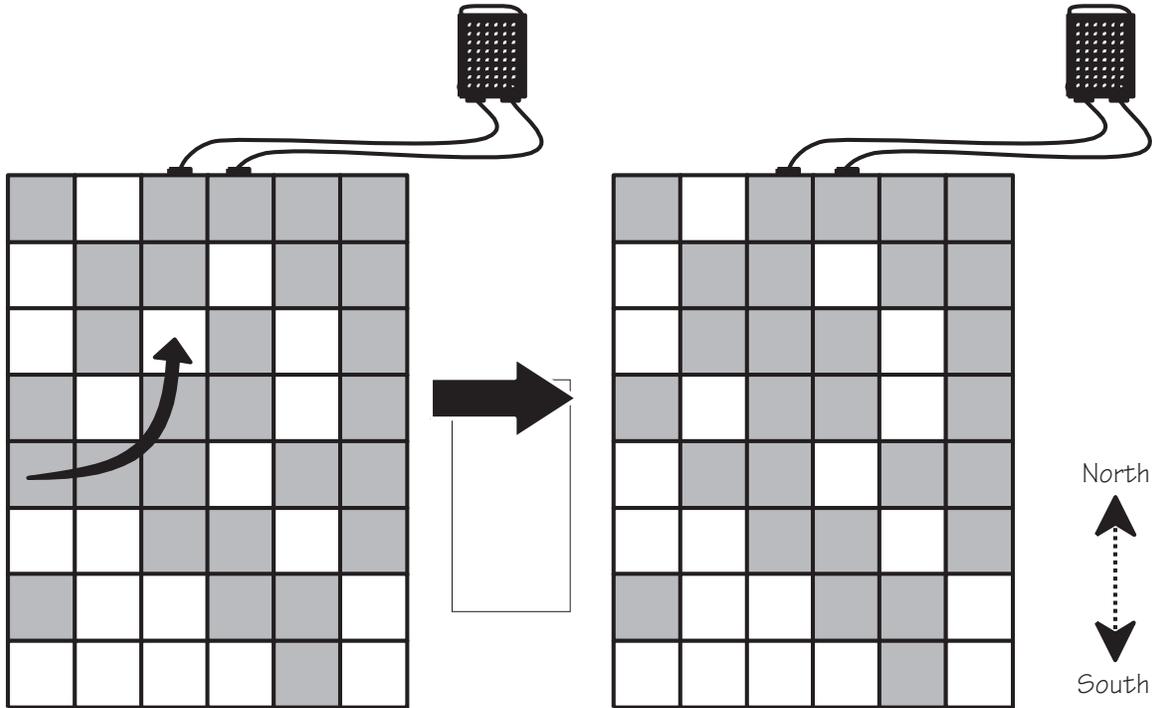
**Explain additional constraints.** No additional constraints are imposed on the management team: They can talk to each other and use writing materials. However, the worker's team has several restrictions: Once they are brought to the maze room, they cannot talk to each other. They cannot use any notes or writing materials. Only one person can be on the maze at a time. Workers cannot enter the maze for their second try until every other worker has completed his or her first try. If the alarm goes off, the worker should retrace the path and get off the maze.

**Keep the workers occupied.** Return to the meeting room. Explain to the workers that they have to wait for the managers to brief them. Ask the workers to continue brainstorming a list of ideas on how managers should delegate tasks and responsibilities to the workers. Encourage the group to use the flipchart.

**Facilitation** Return to the maze room. Answer questions from the managers and get them started. Start the timer. Return to the meeting room and ask the workers not to share their brainstormed list with the managers until the end of the activity. Return to the maze room.

When 5 minutes have expired, remind the managers that one or more of them can talk to the workers in the meeting room. After 15 minutes on the timer, send all managers to the meeting room and remind them that they have only 5 more minutes to completely brief and train the workers.

While this is taking place, move one of the pins in the control module to create this maze pattern:



Move the pin as shown.

At the end of 20 minutes, take the workers to the maze room. Remind the workers that they cannot talk to each other (but can use gestures and grunts). Tell the managers that they can watch the workers but cannot help them in any fashion. Remind the workers that they have 15 minutes to get everyone across the maze, one person at a time.

### **Ending The Activity**

If all workers cross the maze within 15 minutes, congratulate them—and their managers. If not, call time at the end of 15 minutes. Show the safe path and have all workers cross the maze.

**Debriefing** Here are suggested questions for use with the five-phase debriefing structure:

- Observation**
- What were your experiences at the beginning of the activity?
  - What were your experiences at the end of the activity?
  - What were the managers' experiences during the planning activity?
  - What were the workers' experiences during the brainstorming session?
  - What were managers' experiences during the worker training activity?
  - How did the managers behave towards the workers?
  - How did workers behave towards the managers?
  - What were the workers' thoughts when the maze turned out to be different from what the managers told you?
  - What were the workers' thoughts when the first person made it across the maze?

- Interpretation**
- State the following hypotheses and ask if the participants agree or disagree with each. Ask them to provide supporting data from the maze activity and from the workplace.
  - Although the managers and workers are on the same side, there is an implied competition between them.
  - Workers feel ignored while managers are busy getting their act together.
  - While managers could have established initial contact with the workers after the first 5 minutes, they generally wait until later.
  - Workers assume that the manager's task is simpler than it really is.
  - Managers assume that the worker's task is simpler than it really is.

- Managers present technical information to the workers and avoid organizational suggestions.
- Managers supply the solution instead of teaching a problem-solving process.
- All managers take on the same responsibilities. There is no specialization among different managers.
- Managers give more information than what the workers need.
- Workers feel that they could have done a better job of briefing and training than the managers.
- Managers feel that they could have done a better job of handling the new maze pattern than the workers.
- When frustrated, managers and workers blame each other (or the facilitator) rather than the process.

**Speculation**    What if —

- the workers did not have the brainstorming activity to keep them occupied while waiting for the managers to brief them?
- the managers were asked to involve the workers in the planning process?
- the workers were brought to the maze room for the last 5 minutes of briefing and training?
- the managers were given more time for their preparation?
- the managers were given a map of the maze?
- the managers were warned that the maze pattern might change?
- there were twice as many managers?
- there were only two managers?
- there were twice as many workers?
- there were only two workers?
- the maze pattern were not changed?

- the managers were permitted to coach the workers during their turn on the maze?

**Correlation** ■ What experience during this activity reminds you of similar experiences in your workplace?

Follow up with specific questions related to each of the principles listed in the previous set of questions.

**Application** Begin with these general questions:

- If we conducted the same activity again, how would you behave differently — knowing what you know now?
- Using the maze activity as a metaphor, how would you change your behavior in the workplace?
- How would you apply the learning insights from the maze activity to solving your workplace problems?

Follow up by repeating hypotheses from the interpretation phase and asking this question:

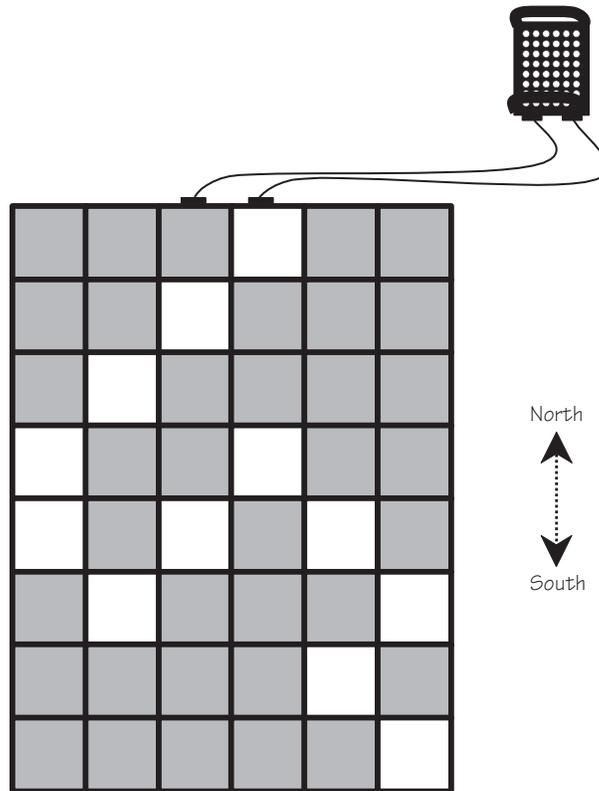
- How can this principle be used to improve productivity and performance in the workplace?



# MEMOS

- Synopsis** Participants take the roles of several people in a company: a president, two managers, and many workers. After the initial briefing, no one may talk, but any one can send memos to certain other people. The president has a map of the maze. He or she cannot see what is happening on the real maze, cannot show the map to anyone, and can only send memos to the managers. The object of the activity is for the workers to cross the maze within a given time limit.
- Purpose** To explore factors that empower workers in a traditional, hierarchical organization.
- Participants** At least 13. (This gives you a president and two teams of five workers and a manager each.)
- Time** 45 minutes (5 minutes for briefing, 25 minutes for the activity, and 15 minutes for debriefing)
- Supplies**
- Maze
  - Timers
  - Flipchart (for keeping track of fines and for use during debriefing).
  - Memo sheets of three different colors (one each for workers, managers, and the president). Each sheet has spaces for 50 characters to limit the length of the memos.
  - Map of the maze showing the pattern.

**Setup** Set up the maze using this pattern. Safe spaces are shown in white.



Put a pin in each WHITE square.

Set up the president's chair and table in a corner of the room to prevent him or her from being able to see what is happening on the maze.

**Briefing** Provide the standard introduction to the maze (page 17). Assemble all participants for this briefing.

**Assign roles.** Identify the president, the managers, and the workers. Assign approximately equal numbers of workers to the different managers.

**Specify the goal.** All workers will cross the maze from the south edge to the north edge without sounding the alarm. Their overall performance will be determined by the amount of money they have at the end of the activity.

**Specify the time limit.** Participants have 20 minutes to get all workers across the maze.

**Explain costs and rewards.** Tell the participants that they are all working for a company, and this company now has \$100,000. The company earns a bonus of \$10,000 for every minute saved on the 20-minute time allocation. For example, if all workers cross the maze in 15 minutes, the company will receive a \$50,000 bonus. However, each time someone sets off the alarm while backtracking, the company has to pay a \$10,000 fine. There is no penalty for sounding the alarm while moving forward; only for making unnecessary mistakes on the way back.

**Distribute the memo forms.** Explain that any participant can write and deliver any number of memos to authorized people. The memo form contains 50 blank spaces, and each space may be filled by any characters available on a standard typewriter keyboard (including blank spaces). The memo can contain information, questions, and suggestions.

**Explain the constraints.** No participant is permitted to talk.

Workers can walk on the maze, one person at a time. They can write memos to each other or to the managers. They cannot keep any written or graphic records for their own use.

Managers cannot walk on the maze. They can observe the workers on the maze and signal to them. They can write memos to each other, to *their* workers, or to the president. Managers can keep any written or graphic records for personal use, but may not show them to anyone else. For example, a manager may draw a map of the maze, but cannot show this map to anyone else.

The president will be given a map of the maze, but cannot directly observe the maze. The president can write memos to the managers and keep any kind of written or graphic records. However, the president may not show the maze map or any of these records to anyone else.

- Facilitation** Answer questions from the participants.
- Escort the president to the appropriate location and give him or her a map showing the maze pattern.
- Announce the beginning of the activity and start the timer.
- Monitor the activities to make sure that no one talks and that memos are sent only to the appropriate people. Also make sure that only one worker is on the maze at a time. When the alarm goes off, ask the worker on the maze to backtrack his or her path. If the worker sets off the alarm while backtracking, announce a fine of \$10,000 and add this amount to the list of fines on the flipchart.
- Announce the elapsed time once every 3 minutes.
- Ending The Activity** The activity ends when all workers cross the maze. If this happens, stop the timer. Round the elapsed time to the nearest minute. Subtract this time from 20 minutes, and award a bonus of \$10,000 for each minute saved. Add this to the original amount of \$100,000. Add up the total fines and subtract this amount from the time-savings bonus. Congratulate the team for a job well done.
- If time runs out before all workers have crossed the maze, announce the end of the activity.
- Debriefing** Here are suggested questions for use with the five-phase debriefing structure:
- Observation**
- What were your experiences at the beginning of the activity?
  - What were your experiences at the end of the activity?
  - What happened among the workers who belonged to the same manager?
  - What happened among different groups of workers?
  - What happened between the managers?
  - What happened between the managers and the president?

- What happened when you sent a memo?
- What happened while you waited for the memo?
- What happened when you received a response to your memo?
- What happened from the workers' point of view?
- What happened from the managers' point of view?
- What happened from the president's point of view?
- What were your thoughts about the memo system?
- What were your thoughts when someone set off the alarm while backtracking and earned a fine for your company?
- What were your thoughts when the first person made it across the maze?

### **Interpretation**

- State the following hypotheses and ask if the participants agree or disagree with each. Ask them to provide supporting data from the maze activity and from the workplace.
- Although the managers and workers are on the same side, there is an implied competition between them.
- Although the teams are working for the same company, there is an implied competition between them.
- Workers, managers, and the president don't understand or appreciate each others' responsibilities and contributions.
- All managers take on the same responsibilities. There is no specialization among different managers.
- Managers give more information than the workers need.
- It is easy for a president to lose sight of reality when he or she has to depend on written memos.
- When frustrated, members of a company blame each other (or the facilitator) rather than the process.
- Written memos slow down the process.
- Written memos increase the accuracy of communication.

- Memos create misunderstandings.
- Having to communicate through a manager delays the implementation of the president's plans.
- Work is delayed while waiting for responses to memos.
- Time is wasted when workers wait for instructions from managers and when managers wait for instructions from the president.
- Without managers, workers will behave in a chaotic, inefficient fashion.
- Fines and penalties make people work more carefully.
- Bonuses for saving time encourage people to take unnecessary risks.

**Speculation**    What if —

- there were no time limit?
- there were a tighter time limit of only 10 minutes?
- there were two levels of management?
- there were four managers instead of the two?
- each manager had twice as many workers?
- there were no managers?
- everyone was a worker?
- one team worked from south to north while the other team worked from north to south?
- a fine was imposed *every* time the alarm went off?
- the two managers had separate budgets?
- one team was much larger than the other team?

- Correlation** ■ How do your experiences during this activity remind you of similar experiences in your workplace?

Follow up with specific questions related to each of the principles listed in the previous set of questions.

**Application** Begin with these general questions:

- If we conducted the same activity again, how would you behave differently — knowing what you know now?
- Using the maze activity as a metaphor, how would you change your behavior in the workplace?
- How would you apply the learning insights from the maze activity to solving your workplace problems?

Follow up by repeating hypotheses from the interpretation phase and asking this question:

- How can this principle be used to improve productivity and performance in the workplace?



# INFO SALE

- Synopsis** Participants receive play money and information on whether or not some of the maze squares are activated. They can buy, sell, or exchange information with each other. Individuals or teams can attempt to cross the maze whenever they figure out a safe path. Participants who fail pay a fine, while those who succeed receive a reward.
- Purpose** To explore factors related to conflicts between individual and team achievement.
- Facilities** This activity requires two rooms: the main room, where participants spend most of their time, and the maze room, where they attempt to cross the maze.
- Facilitators** Each room should have a facilitator. Either arrange for a co-facilitator to coordinate the maze room, or select (and train) one of the participants to fill this role.
- Participants** 5 to 30.
- Time** 50 minutes (5 minutes for briefing, 30 minutes for activity, and 15 minutes for debriefing)
- Supplies**
- Maze
  - Timer (for keeping track of the total time spent)
  - Sign-up sheet

- An envelope for each participant. This envelope contains three items:
  - **Information card.** This card provides information about some of the squares in the maze. It presents the information in a cryptic form such as F8-safe, A4-safe, E5-active, and so on. Each card has different sets of information. If there are fewer than 10 participants, each card has information on nine squares. With 10 or more participants, each card has information on five squares.
  - **\$700 in play money.**
  - **A blank maze grid.** The six columns are labeled A through F, and the eight rows labeled 1 through 8.

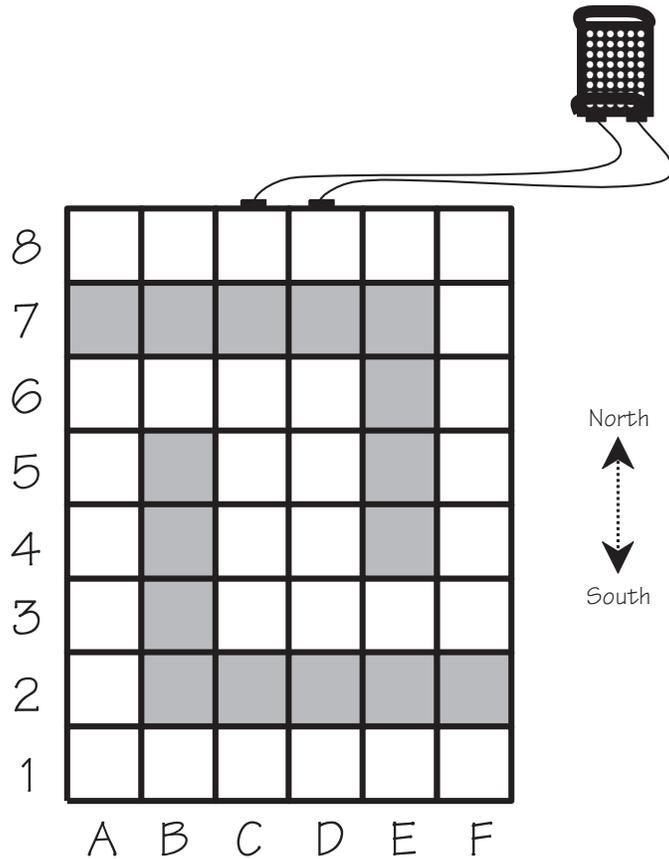
### **Setting Up**

Prepare an envelope for each participant. If you have fewer than 10 participants, copy page 10 and cut out one card for each participant. Begin with Card 1 and proceed in sequential order. (If you have 10 or more participants, copy page 9 and use its cards instead.) Place one information card in each envelope.

Make multiple copies of the play money sheet (page 11). Cut out the bills of various denominations and place \$700 in each envelope.

Make one copy of the blank maze grid (page 8) for each participant. Place a copy in each envelope.

Set up the maze in the maze room. Use the following pattern:



Put a pin in each WHITE square.

Have your co-facilitator wait in this room for the participants who try the maze. Give the co-facilitator \$30,000 in play money to pay out as rewards.

Assemble all participants in the main room.

**Briefing** Provide the standard introduction to the maze (page 17).

**Specify the goal.** Participants make money by selling information to each other or by successfully crossing the maze. At the end of the activity period, the participant with the most money is the winner.

**Specify the time limit.** Participants have 30 minutes to form teams, buy, sell, or exchange information, and attempt to cross the maze.

**Explain teamwork procedure.** Participants can either play as individuals or form themselves into teams. Teams can be of any size. If a team wishes to attempt a maze crossing, it must first agree how to divide the prize money (or the fine) among its members. It must also designate the member who will attempt the actual crossing.

**Explain Prizes.** The first person (or team) to successfully cross the maze gets \$5,000. The second one gets \$4,500, and so on, each receiving \$500 less than the preceding one. Any participant (or team) that sounds the alarm while attempting to cross the maze is fined \$100 and must leave the maze immediately.

If a participant succeeds in crossing the maze, he or she cannot cross the maze again. If this participant was part of a team, none of the other members of the team may attempt crossing, either individually or as part of another team. However, such persons may freely sell information to other participants or teams.

**Explain the maze-crossing procedure.** When a participant (or team) is ready, he or she must sign on the sheet. When it is this participant's turn, he or she goes to the maze room. If this person is part of a team, the whole team goes to the maze room — but only the designated crosser steps on the maze. When the designated crosser is finished, the facilitator in the maze room pays out the prize (or collects the fine) as appropriate. The participant then returns to the main room and announces whether he or she was successful. The next person or team on the sign-up sheet then proceeds to the maze room.

- Facilitation** Answer questions from participants.
- Announce the beginning of the activity. Start the timer.
- Distribute the envelopes. Tell participants that they may look inside their envelopes, but *should not show their information cards to each other*. Explain that each participant has a blank maze grid, information on some maze squares, and \$700 in play money. Point out that different participants have information on different squares. Participants may freely talk to each other, forming teams and selling (or exchanging) information on whatever mutually acceptable terms they wish. However, participants may not show their information cards to each other. (There is no rule prohibiting a participant from selling false information, but you need not point this out.)
- Ending The Activity** Conclude the activity at the end of 30 minutes. Ask all participants to settle their accounts and count the amount of money they have.
- Identify the participant with the largest amount of money. Congratulate the winner.
- Debriefing** Here are suggested questions for use within the five-phase debriefing structure:
- Observation**
- What happened at the beginning of the activity?
  - What happened at the end of the activity?
  - What are your thoughts about the person who has the most money?
  - What are your thoughts about the person who has the least money?
  - What are your thoughts about the participants who worked alone?
  - What are your thoughts about the other members of your team?
  - What were your thoughts when the first person successfully crossed the maze?

- How did you use your information?
- Did you sell information or exchange it?
- What are your thoughts about anyone who sold false information?
- How did you figure out the safe path through the maze?
- Did you wait until you were sure about the path before you tried to cross the maze, or did you take a chance?

### **Interpretation**

- State the following hypotheses and ask if the participants agree or disagree with each. Ask them to provide supporting data from the maze activity and from the workplace.
- There is no one best approach to this activity.
- Some people prefer to work alone, while others prefer to work in a team.
- No one would stoop so low as to sell false information.
- There are advantages and disadvantages to teamwork.
- You don't gain anything by teaming up with people who have the same information as you do.
- Some participants are afraid to take risks.
- You cannot discover the safe path without taking a chance.
- You can win the game without ever attempting to cross the maze.

### **Speculation**

What if —

- you had only 10 minutes for this activity?
- you had 2 hours for this activity?
- there were twice as many participants?
- there were only three participants?
- different participants had different amounts of money to begin with?

- different participants had different amounts of information in their envelopes?
- you were permitted to show your information cards to each other?
- you could buy information from the facilitator?
- some of the information on the cards was incorrect?
- all participants had the same pieces of information?
- each participant had full information about a particular row?
- you had to work in teams of three?
- we used real money (but smaller denominations)?

**Correlation** ■ Does this activity remind you of similar things happening in your workplace?

Follow up with specific questions related to each of the questions discussed in the previous phase.

**Application** Begin with these general questions:

- If we conducted the same activity again (with a different pattern), how would you behave differently — knowing what you know now?
- Using the maze activity as a metaphor, how would you change your behavior in the workplace?
- How would you apply the learning insights from the maze activity to solving your workplace problems?

Follow up by repeating hypotheses from Phase 3 and asking this question:

- How can this principle be used to improve productivity and performance in the workplace?

8						
7						
6						
5						
4						
3						
2						
1						
	A	B	C	D	E	F

<b>Card 1</b> E6: active E1: safe E2: active A4: safe E5: active	<b>Card 7</b> F5: safe B3: active C3: safe E7: active A8: safe	<b>Card 13</b> F7: safe E1: safe A2: safe B4: active B6: safe	<b>Card 19</b> C6: safe D8: safe B5: active A6: safe E6: active	<b>Card 25</b> F7: safe E7: active B6: safe D1: safe C8: safe
<b>Card 2</b> F8: safe B8: safe E3: safe D1: safe D4: safe	<b>Card 8</b> A6: safe B1: safe D2: active F6: safe D6: safe	<b>Card 14</b> C7: active A8: safe F4: safe F3: safe A4: safe	<b>Card 20</b> D7: active C4: safe E8: safe A2: safe F4: safe	<b>Card 26</b> B3: active B4: active C3: safe A8: safe E1: safe
<b>Card 3</b> F3: safe D3: safe C5: safe B7: active D7: active	<b>Card 9</b> A2: safe C8: safe D8: safe A5: safe B4: active	<b>Card 15</b> B8: safe E5: active C4: safe D8: safe B1: safe	<b>Card 21</b> C1: safe C5: safe E2: active B8: safe D2: active	<b>Card 27</b> A3: safe A4: safe E4: active D4: safe F8: safe
<b>Card 4</b> D5: safe F1: safe B6: safe F4: safe C6: safe	<b>Card 10</b> C6: safe D4: safe F1: safe B3: active E7: active	<b>Card 16</b> F8: safe F5: safe E8: safe D5: safe D1: safe	<b>Card 22</b> F3: safe E5: active C2: active D5: safe A1: safe	<b>Card 28</b> D6: safe C3: safe C5: safe E5: active D2: active
<b>Card 5</b> C4: safe A1: safe C1: safe B5: active F7: safe	<b>Card 11</b> D7: active C5: safe A6: safe C2: active A3: safe	<b>Card 17</b> B5: active D3: safe E2: active C1: safe A5: safe	<b>Card 23</b> F5: safe D6: safe F6: safe B7: active B1: safe	<b>Card 29</b> B3: active F1: safe C2: active A6: safe A1: safe
<b>Card 6</b> C2: active E8: safe C7: active A3: safe E4: active	<b>Card 12</b> D2: active B7: active C3: safe E3: safe E6: active	<b>Card 18</b> A1: safe D6: safe E4: active C8: safe F6: safe	<b>Card 24</b> C7: active E3: safe D3: safe F1: safe A5: safe	<b>Card 30</b> D7: active B4: active C6: safe A8: safe B8: safe

<p><b>Card 1</b></p> <p>E6: active E1: safe E2: active A4: safe E5: active F8: safe B8: safe E3: safe D1: safe</p>	<p><b>Card 4</b></p> <p>C7: active A3: safe E4: active F5: safe B3: active C3: safe E7: active A8: safe A6: safe</p>	<p><b>Card 7</b></p> <p>A3: safe D2: active B7: active C3: safe E3: safe E6: active F7: safe E1: safe A2: safe</p>
<p><b>Card 2</b></p> <p>D4: safe F3: safe D3: safe C5: safe B7: active D7: active D5: safe F1: safe B6: safe</p>	<p><b>Card 5</b></p> <p>B1: safe D2: active F6: safe D6: safe A2: safe C8: safe D8: safe A5: safe B4: active</p>	<p><b>Card 8</b></p> <p>B4: active B6: safe C7: active A8: safe F4: safe F3: safe A4: safe B8: safe E5: active</p>
<p><b>Card 3</b></p> <p>F4: safe C6: safe C4: safe A1: safe C1: safe B5: active F7: safe C2: active E8: safe</p>	<p><b>Card 6</b></p> <p>C6: safe D4: safe F1: safe B3: active E7: active D7: active C5: safe A6: safe C2: active</p>	<p><b>Card 9</b></p> <p>C4: safe D8: safe B1: safe F8: safe F5: safe E8: safe D5: safe D1: safe B5: active</p>

