SESSION AT-A-GLANCE	WHO?	HOW LONG?
Introduction	Facilitator	10 minutes
The Game	Facilitator, audience	25 minutes
Debrief and Discussion	Facilitator, audience	25 minutes

The Zin Obelisk Game

Why Use This Game

- To teach how to work as a team to develop hypotheses, test solutions and solve problems.
- To show how to develop better knowledge as you go through multiple cycles of hypothesis development and testing.
- To help teams understand leadership, cooperation and conflict issues in team problem solving.

Target Audience

Team members and others who will be developing and running PDSA cycles, as well as organization leaders who will be overseeing and coaching the work of these teams.

Type of Game

A competition among teams.

Key Concepts

- Teams need to be able to share information and listen to each other to work well.
- In trying to solve a complex problem, some structure is helpful. The approach of developing and testing a hypothesis (the scientific method) can provide this structure.
- Each team will have its own strengths, weaknesses and conflicts. As teams work together more, they will learn how to manage these issues better.

Source, History and Resources for More Information

This game has been used by the New York State Department of Health, AIDS Institute. It comes from: Francis, D., & Young, D. "*Improving Work Groups: A Practical Manual for Team Building.*" San Diego, CA: University Associates, 1979, p. 147–151.

Materials

For this game, you will need:

- A copy of the Zin Obelisk Group Instruction Sheet (Attachment 1) for each participant
- Blank paper and a pencil for each participant
- A set of Zin Obelisk Information Cards for each group (thirty three cards per set – see Attachment 2 for the text of the cards)
- Flip chart and markers
- A copy of the Zin Obelisk Review Sheet (Attachment 3) for the facilitator

Preparation

To prepare for this session:

- Familiarize yourself with the session's structure and content:
 - Read through the game instructions and key teaching points in their entirety.
 - Practice the game itself.
 - Practice presenting the key teaching points.
- Prepare the room:
 - Set up circles of chairs for each team that will participate (the game works best with 5-8 participants).
 - Set up the flip chart so you can capture key points of the discussion after the game.

Playing the Zin Obelisk Game

Welcome and Introductions

To begin the game, welcome participants and thank them for their participation. If necessary, ask individuals to introduce themselves to the group.

Learning Objectives

Tell participants that by the end of the session they will:

- Understand the strengths and weaknesses of their team as it works to solve a difficult problem.
- See how to apply the scientific method developing and testing a hypothesis – to their problem-solving approach.
- Begin to develop strategies for better listening and cooperation within their team.
- See how to apply these concepts to their HIV program.

Agenda

Provide a brief description of the session's primary components:

- 1. Background to the Zin Obelisk Game.
- 2. The game itself.
- 3. Debrief and discussion on what the game shows, and how its lessons can be applied to HIV care.
- 4. Feedback and close.

Background to the Game

Facilitator's note

The Zin Obelisk is a difficult and in some ways absurd puzzle. It uses made-up situations and made-up words, putting everyone on the team in the same position of being unfamiliar with the situation.

The game is structured so no one person has all the information necessary to solve the puzzle. The members of the team must listen to, and respect, each other – and since the puzzle is difficult and the time to complete it is short, team members tempers may fray.

Teams should realize that random stabs at an answer will not help them; they need a systematic approach. While formal PDSA cycles (see The Peg Game for a full description) don't make sense, the scientific method that underlies the PDSA concept may in fact help teams sort through the Zin Obelisk. Just as you learned in high school biology, the scientific method involves developing a hypothesis about what may happen, conducting an experiment and seeing if the result confirms your hypothesis. Most health care workers are familiar with this concept and will be open to applying it to problem-solving.

Key points to explain to your audience:

- Reassure them that this is a difficult exercise taking place under time pressure.
- Suggest to the participants that they be systematic in their approach, and stress that listening and collaboration are keys to success at solving the puzzle.
- Remind participants about the scientific method and suggest that they keep this approach in mind as they work through the puzzle.



The Game Itself

- Divide your group into teams of 5 to 8 participants.
- Distribute to each team member a copy of the Zin Obelisk Group Instruction Sheet (Attachment 1), paper, and a pencil.
- After the members have had time to read the instruction sheet, distribute a set of Zin Obelisk Information Cards randomly among the members of each team. You need one complete set per team (i.e., distribute all 33 cards randomly within one team. If you have more than one team you need additional sets of cards.)
- Allow the team to work on the task; stop them after 25 minutes if they have not completed the task by then.

Debrief and Discussion

Reconvene as a large group. Review results.

• Attachment 2 contains the answer. Make sure each participant understands the rationale for the answer, walking through it if necessary.

- Ask each group to describe its process, using the following questions as a guide:
 - What behavior helped the group accomplish the task?
 - What behavior hindered the group in completing the task?
 - How did leadership emerge in the team?
 - Who participated most?
 - Who participated least?
 - What feelings did you experience as the task progressed?
 - What suggestions would you make to improve team performance?
- Ask if groups used the scientific method and, if so, whether it was helpful.
- Ask participants about teamwork in their HIV programs:
 - Do they use teams to solve complex problems?
 - If so, how do they work? What works well, and what could be improved?
 - Do any of these teams use the scientific method as an approach? Do they try to develop and test hypotheses about changes that might lead to improvement? If so, how does this work? If not, how could you get them to try this approach?

Feedback and Close

- Ask your audience for feedback on whether this session met its objectives. Take notes of their responses on a flip chart, and keep it for your use in the future.
- Schedule an informal follow-up session with any audience member who wants clarification or more information on the game or the concepts you discussed.
- Thank your audience for their hard work and success.

Attachment 1

Game Instruction Sheet

In the ancient city of Atlantis, a solid, rectangular obelisk, called a zin, was built in honor of the goddess Tina. The structure took less than two weeks to complete.

The task of your team is to determine on which day of the week the obelisk was completed. You have twenty-five minutes for this task. Do not choose a formal leader.

You will be given cards containing information related to the task. You may share this information orally, but you may not show your cards to other participants.

Attachment 2

Text for the Zin Obelisk Information Cards

Make a set of thirty-three cards by typing each of the following sentences on a 3"x5" index card:

- 1. The basic measurement of time in Atlantis is a day.
- 2. An Atlantian day is divided into schlibs and ponks.
- 3. The length of the zin is 50 feet.
- 4. The height of the zin is 100 feet.
- 5. The width of the zin is 10 feet
- 6. The zin is built of stone blocks.
- 7. Each block is 1 cubic foot.
- 8. Day 1 in the Atlantian week is called Aguaday.
- 9. Day 2 in the Atlantian week is called Neptiminus.
- 10. Day 3 in the Atlantian week is called Sharkday.
- 11. Day 4 in the Atlantian week is called Merma idday.
- 12. Day 5 in the Atlantian week is called Daydoldrum.
- 13. There are five days in an Atlantian week.
- 14. The working day has 9 schlibs.
- 15. Each worker takes rest periods during the working day totaling 16 ponks.
- 16. There are 8 ponks in a schlib.
- 17. Workers each lay 150 blocks per schlib.
- 18. At any time when work is taking place there is a gang of 9 people on site.
- 19. One member of each gang has religious duties and does not lay blocks.
- 20. No works takes place on Daydoldrum.
- 21. What is a cubitt?
- 22. A cubitt is a cube, all sides of which measure 1 megalithic yard.
- 23. There are 3 1/2 feet in a megalithic yard.
- 24. Does work take place on Sunday?
- 25. What is a zin?
- 26. Which way up does the zin stand?
- 27. The zin is made up of green blocks.
- 28. Green has special religious significance on Mermaidday.
- 29. Each gang includes two women.
- 30. Work starts at daybreak on Aquaday.
- 31. Only one gang is working on the construction of the zin.
- 32. There are eight gold scales in a gold fin.
- 33. Each block costs 2 gold fins.

Attachment 3

Answer and Rationale

The answer is Neptiminus.

Rationale:

- 1. The dimensions of the zin indicate that it contains 50,000 cubic feet of stone blocks.
- 2. The blocks are 1 cubic foot each, therefore, 50,000 blocks are required.
- 3. Each worker works 7 schlibs in a day (2 schlibs are devoted to rest).
- 4. Each worker lays 150 blocks per schlib, therefore each worker lays 1050 blocks per day.
- 5. There are 8 workers per day, therefore 8,400 blocks are laid per working day.
- 6. The 50,000th block, therefore, is laid on the sixth working day.
- 7. Since work does not take place on Daydoldrum, the sixth working day is Neptiminus.