LOTS OF DOTS

This is a very successful exercise in teaching students to share information with others. There is no way that the group can arrive at a solution without extensive talk between participants. In that sense, the exercise is a good beginning one for teaching how to be a member of an interdependent group. A good way to express this feature of the task is that:

EVERYONE GIVES INFORMATION

However, the exercise also pushes the group to arrive at some grand strategy for coming to a solution. If they do not make plans and agree upon a strategy they will not be very successful. Thus two important norms for cooperation that this exercise teaches are:

MAKE A PLAN

AGREE ON STRATEGIES

Lots of Dots also requires that students be able to describe complex patterns in words alone. Thus it is a good step in preparing students to verbalize their perceptions and thoughts. A third norm you can emphasize in your discussion with the group is:

DESCRIBE ACCURATELY AND CAREFULLY

THE TASK

The group receives a set of cards distributed among the members face down. The group must discover which card in the entire set is a singleton, i.e., it is unique. Each card in the set has one of more duplicates except the singleton card.

THE RULES

1. When your group indicates that the unique card has been identified, the task is ended whether or not you are correct. Therefore, be sure everyone is confident of your choice before you call the scorekeeper over. One person in the group should note how long the group has taken before they arrive at a possible solution.

2. You may organize yourselves in any way you wish to complete this task with only the following restrictions:
   
   − You cannot show your card to another member.
   − You may not pass cards to another member.
   − You must not look at another member's cards.
   − You cannot draw pictures or diagrams of the designs.
– Do not refer to the numbers on the back of the cards.
– Do not pool your discards (i.e., keep your own discards in your own separate pile).
– You may talk any way you choose.

After introducing these rules, hold up one card and discuss how these rules force people to share information. The group will not be able to arrive at an answer unless every member of the group can describe his or her card. These rules also force people to describe very carefully what is on the card. Practice with the group describing the card. Point to the norm: Describe Accurately and Carefully.

Give the class the clue that they will be able to be much more successful if they Make A Plan and Agree On A Strategy.

Limited English proficient students can describe cards with pantomime. Also, you can put up on the board basic words in the student's language like "dots", "empty" and "full." In this way the student can make himself or herself understood to the group. Appoint a scorekeeper. The scorekeeper must write down how long each group took and whether or not they had the right answer on the board.

MATERIALS:

The patterns for the cards are presented on the following pages along with the correct answer. Use colored oaktag and xerox these patterns onto the oaktag. There should be enough cards so that each group gets a complete set.

DISCUSSION

Ask the most successful two groups to come up and form a panel. Have the students discuss what plans and strategies they made. Ask them how these plans and strategies helped them do so well on the task. Ask them specifically to talk about how they came to agreement. Did they seek everyone's opinion? Did someone send up a "trial balloon" to see how much agreement the group had? Then ask volunteers from the rest of the group to describe difficulties the groups experienced in arriving at a plan or in coming to agreement on a strategy. Ask class what this group might have done to solve its problem. Share with the group your observations about how well people did in sharing information and in describing accurately and carefully. Talk about how these new norms will be applicable in the Complex Instruction tasks they will undertaken.
FIGURE A.4

THE ANSWER

TOP ROW  ○ ○ ○ ○ ● ● ● ● ○ ○ ○ ○

BOTTOM ROW ● ● ● ● ● ● ● ● ○ ○ ○ ○

SQUARE IS AT THE BOTTOM