HONG AND PAGE EXERCISE

Preparation: Print out the PDF of graphs with payoffs. Give one to teach student Give each student marker, like a penny or something. Ask the students to take out a piece of paper to record their progress.

Demonstration: Put one of the graphs on the projector and show them how to move from one square to another until you reach a "local maximum." Explain to them how this works.

First round: Have all the students work alone. Have them "hill climb" with each of the following starting numbers:

0, 1, and 11.

Round two: Now make a ranked list on the board of who did better or worse than the others. Form pairs based on how they did (pairing the top two together, third and fourth together, etc.). Now the rules are slightly different: both players can move supposing that one of the players has connection. See how they do for these three:

2, 10, and 12

Round three: Form new groups of two at random. See how they do with these numbers:

3, 5, and 11