

# PEER-LED TEAM LEARNING LEADER TRAINING

## Integrating the *Guess ChemWho* Game into Peer-Led Workshops

Nancy Ulloa and James E. Becvar

### Introduction

We have found that the problem of uneven participation from the students in Workshop can be remedied through the use of games. In the *Guess ChemWho* game, a game loosely based on a popular household game, students are placed into pairs of teams. Identical decks of cards are prepared for the two teams in a pair. Each team selects a card and asks questions of their opponents in an attempt to single out the concept, equation or structure they have chosen in order to identify the opponents' card. *Guess ChemWho* causes students to place the subject matter in perspective and to gain a conceptual understanding of the topic being studied. A significant advantage of *Guess ChemWho* is that the format can be applied to any subject or topic.

### How the *Guess ChemWho* Game is Played

- Students in workshop are organized into an even number of teams forming pairs of teams.
- Each team in the pair is given a set of cards containing a structure, graph, equation, or something the students are to learn that relates to the topic being studied.
- Each team chooses one card from the deck without the opposite team seeing the card.
- Teams take turns formulating a scientific question to ask the opposing team in order to figure out what card the opposing team has.
- Questions are asked in a process of elimination until someone figures out the card of their opposing team.
- For example: if the topic being covered in lecture is naming organic molecules, the opposing teams might be given sets of cards with molecules with different functional groups.
- Suppose Team A selects acetone. Team B can ask "does your molecule have a carbonyl group?" Team A will respond "yes" and thus Team B can eliminate cards not containing a carbonyl as they work toward the final solution of the actual molecule.

### Advantages

- Students learn in a fun setting
- Promotes team skills

- Allows students to correlate information in ways quite different from lecture
- Builds confidence
- Can be applied to almost any topic

### Conclusion

Integrating interactive activities such as the *Guess ChemWho* game into PLTL workshops serves as a beneficial and fun way to review concepts and internalize ideas taught in lecture.

### Background

Peer-Led Team Learning (PLTL) helps students successfully transition from a high school environment into the challenging world of college. The Award winning Plus Two PLTL format, developed at the University of Texas at El Paso (UTEP), replaces one hour of lecture with two hours of Peer-Led small learning-community workshops integrated within the course framework. The 'Free Style' PLTL format at UTEP allows students to see course material presented in a different perspective from that of lecture. Breaking a large class into small groups allows for more interactive team-based learning, and more one-on-one time between the students and the leader. The passing rate for freshman chemistry has dramatically increased (53 to over 70%) since the integration of Plus Two PLTL workshops in 2000.

*Nancy Ulloa, Peer Leader*

*James E. Becvar, Department of Chemistry, University of Texas at El Paso*

**Cite This Article as:** Ulloa, N., Becvar, J.E. (2012). Integrating the *Guess ChemWho* Game into Peer-Led Workshops. Peer-Led Team Learning: Leader Training. Online at <http://www.pltlis.org>. Originally published in *Progressions: The Peer-Led Team Learning Project Newsletter*, Volume 9, Number 3, Spring 2008.