Promoting Concept-Driven Teaching Strategies in Biochemistry and Molecular Biology through Concept Assessments

TIME TO FORM GROUPS

Regional ASBMB RCN Meeting
Visualization and Assessment
Purdue University
3 November 2012
Problem-solving is what you do when you don’t know what to do, otherwise it is not a problem.

Wheatley (1984)
Forming Groups
Homogeneous vs. Heterogeneous

Your Class

“Homogeneous” Groups

“Heterogeneous” Groups

Student Selected

Instructor Selected
What Aspects of Heterogeneity are Important for this Workshop?

- Skills?
- Age?
- Discipline?
- Gender?
- Personality Type?
- Learning Style?
- Class size taught?
- Ethnicity?
- Institution Type?
If you know you want to form heterogeneous groups, but don’t know critical information about your audience, what can you do?

Let the them help you.
**Forming Heterogeneous Groups Without Prior Information**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you are Female, add 400</td>
<td>-</td>
</tr>
<tr>
<td>If you are Male, add 200</td>
<td>200</td>
</tr>
<tr>
<td>If you are younger than 30 years old, add 200</td>
<td>-</td>
</tr>
<tr>
<td>If you are between 30 and 50 years old, add 150</td>
<td>-</td>
</tr>
<tr>
<td>If you are older than 50, add 100</td>
<td>100</td>
</tr>
<tr>
<td>If you are employed by a PUI – add 100</td>
<td>-</td>
</tr>
<tr>
<td>If you are employed by a University – add 50</td>
<td>50</td>
</tr>
<tr>
<td>Sum the last 2 digits of your Phone Number</td>
<td>8</td>
</tr>
</tbody>
</table>

| GRAND TOTAL (Your Number)                         | 358    |

*When you have calculated “Your Number”, line up in numerical order.*