The Effect of Guided Group Problem Solving Sessions on Performance of **Students on Introductory Chemistry Assessments Dr.Hanan Mogawer, Chemistry Department**

Course Background

Introductory Chemistry CHM103 is a General Education science knowledge outcomes course tailored for students in the textile sciences, or in one of the allied health fields such as: nursing and nutrition. Students will learn about:

- ions, atoms, molecules.
- chemical bonding,
- structure of atoms.
- The Mole.
- Balancing Chemical Reactions, etc.
- Reasons for implementation of the study:
- Students may have not had adequate preparation for college chemistry.
- Students found chemistry problems challenging.
- They perform poorly on chemistry assessments.
- They fail or drop out of chemistry courses.

These were factors that directed this study.

- Scaffolding.
- - worksheets.
- Outcomes:



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Course Changes

Students taking Introductory Chemistry courses may struggle and fail these courses. With my students I experimented with incorporating: Collaborative Learning AND

In this brief experimental study:

I design guided worksheets for every chapter of the chemistry book being used.

I let students work in groups to work on these

- This method showed a significant improvements on students' chemistry assessments as shown in the graphs





THINK BIG



Results





Scores Without the Use of The Guided Worksheets

Scores With the use of The Guided Worksheets



