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Author: Al-Doori, Ghazwa <ghazwaa@sas.upenn.edu>

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Subject: Implementing POGIL Technique

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Ghazwa Al-Doori

Edu. 536

Research Proposal (preliminary)

11/3/2007

Implementing POGIL Technique to High School Students

The study in this research is to explore the dissemination of POGIL methods and material in High School level chemistry courses.

The question that might evolve while progressing in this research is if the POGIL technique can simultaneously teach content and provide the ability to work affectively as part of a collaborative team to students taking chemistry course for the first time in their High School.

Teaching by telling is the method used in most schools and it is the method I use and was the method I learned from. My experience with POGIL number one-The dimensional analysis -I tried to implement 3rd week this year was not successful.

I usually start any subject I teach whether it is Physical Science, Physics, Chemistry or Algebra with conversion factors, density, SI system, and the DRUL rule; It is a technique I learned from my son's Biology teacher to convert from bigger units to smaller units and vice versa, which I started implementing it in my classes for 3 years in a row now.

After laying down the basics for the subject of concern by explaining and working on examples to implement what I taught for it would be the foundation to build on for the rest of the course.

Students struggled with this POGIL for 2 periods in a row; I realized that the information given in the POGIL was just not enough for the level in his class.

Students simply needed more knowledge; more information repeated to them over and over followed by implementation using exercises for them to reach the point here they can construct their own understanding. During the time students were working on this POGIL hands were raised for many questions which made me stop the process and start telling them more information, basically explaining every little detailed information starting from how conversion factors are set up, what does the word per mean and the five steps used to convert factors properly.

Here we go back to our traditional way of teaching and the POGIL just became a worksheet that was assigned for homework. Next day we worked on this "worksheet" together on the board emphasizing on the main concept, it was just too early for the student to gain the ability to develop a good ownership over the material, they needed more information and more time.

This brings me to another struggle in implementing the POGIL method: I do believe that - The discovery-based team environment- energizes students and helps improve logical thinking, but this takes time, more than I can afford for each lesson. As long as the school year may seem, for my yearly plan, it is not. Every week passes by has the amount of material should be covered and I just can't see how that can be compensated.

In this research I want to bridge the gap between implementing the POGIL method and the depth of the knowledge of fifteen or sixteen years old ten/eleven grade High School students.

In this research the depth of knowledge equates type and level of knowledge as well as seeking connection among various pieces of information or applying the newly learned information to every day life phenomenon. All this comprises meaningful conceptual understanding. In the next two sections, I discuss the theoretical consideration for both the conceptual understanding and POGIL method of teaching for high

Is this a good way for doing the stuff

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