Dear Introductory Chemistry Teacher,

Thank you for your interest in setting up a CALM course. Recently, the U.S. Department of Education funded a study to examine the effectiveness of CALM in promoting student chemistry achievement. The study, funded by the Institute for Education Sciences, is an opportunity for us to extend CALM’s reach to many more teachers and students than was previously possible. We are currently looking at recruiting teachers to join this ongoing study and hope you would consider taking part for next year. The study is a one year commitment for teachers and more information is found below.

Our goal with CALM is to impact the level of high school science education across the nation, using a tool and an approach that have been proven to work. We provide teachers with a web-based homework tool that requires students to focus on and develop their problem solving skills through dynamically randomized content. In addition, CALM is a collaborative tool that creates a network linking high school teachers both with each other and with university faculty, along with resources in higher education. It is through this network (the CALM Community) that the dissemination of high quality, standards-based/aligned material is possible.

**Participation in the Study**

We are seeking high school introductory chemistry teachers who have not previously implemented CALM in their classrooms to participate in this study. The study itself is an experimental design, where half of the teachers who volunteer to participate in a given year will be assigned to implement the online CALM tool in their Introductory Chemistry classrooms, and the other half will be asked to use the CALM chemistry problems, but not the CALM online tool in their Introductory Chemistry classes. We are asking that teachers use CALM and/or the CALM chemistry problems as a primary source of homework or applied practice for students.

We are asking teachers to commit to participation for one term of Introductory Chemistry. We will be recruiting three cohorts of teachers—one during Year 1 (we currently have around 80 teachers participating), Year 2 (we will begin recruiting in the fall of 2009), and Year 3. Control group teachers (those using only the CALM homework problems, not the online CALM tool) will be invited to use the online CALM tool in their classrooms after their first year of participation in the study.

The criteria for all teachers being selected to participate in the study include the following:

- Plan to teach at least one Introductory Chemistry course during the study;
- Commit to maintaining assessment results online of students’ performance on CALM homework problems (using a recording system developed by the CALM team);
- Commit to administering the ACS high school chemistry exam (provided by research team) at the end of the introductory chemistry class targeted for the study.

Additional research activities for those who are selected to implement the online CALM tool (treatment group) include:

- Provide letter of support from your building administrator.
▪ Attend a two-day workshop on CALM at Indiana University during June or July;
▪ Engage in writing monthly online journal reflections about the use of CALM; and
▪ Allow researchers to observe chemistry instruction, participate in on-site interviews, and have students participate in focus groups about the use of CALM (if selected).

Teachers will receive a stipend of $150.00 for participating in the study. In addition, we will cover travel, hotel and a per diem to each teacher to attend a CALM training workshop in the summer prior to implementing CALM in the classroom for treatment teachers or the year following their participation in the study for control teachers.

For more information about CALM, you can find us online at

http://calm.indiana.edu

If you are interested in participating in this research study and implementing CALM in your classroom or have further questions, please contact us at

calmceep@indiana.edu

Thank you for your interest in and willingness to participate in this important study.

Sincerely,

Kimberly Arnold