BtSM 2009

This was the SIG that was…Problem-Oriented Learning and Empowerment

Summary report by Lya Visser

Introduction

It started like three SIG's in one:

- A special interest group related to Empowerment organized by Shahinaz Mekheimar
- Another one dealing with Problem-Oriented Learning organized by Marion Porath
- And a last one looking at the Instructor as a Builder of the Scientific Mind organized by Lya Visser

On the one hand it seemed to be unfortunate that in two of the SIG's confirmed participants could at the last moment not come to Cairo, on the other hand it was great that we, fortunately, managed after sometimes fierce discussions, to turn the three SIG's into a more general one which we called the new SIG *"The Problem Raising, Discussing and Solving SIG"*.

Problems and issues discussed

The problems and challenges that we brought up related in the first place to "How to reach the audience if we want to build the Scientific Mind". Interesting was that although we did not have the same ideas about reaching the audience, we found that the roads may be different (classroom sessions, workshops, focus groups, seminars etc.), but that the goal was the same and that there were different effective ways to realize the objectives. How we travelled the road depended on our audience, their needs, the learning landscape and the "vehicles" that were available.

Discussing our experiences, our doubts, our problems and possible solutions was a useful and good experience, that led to clarification and understanding of our goal: Building the Scientific Mind through teaching, training, facilitating, learning. We recognized that empowering people requires dedication, tact and a profound understanding of both the

problems that have to be tackled and the target audience. Problem-Oriented Learning makes it possible to help students build a deeper understanding of their learning tasks and to increase students' involvement and motivation. The role of the instructor in building the scientific mind has a premise that the latter understands what the concept 'the scientific mind' means and how the building of this mind can be facilitated.

The second session

During our second session we were joined by four professors from the American University. They had, in a session during the 2009 BtSM Colloquium, introduced and discussed their foundation course aimed at increasing the Scientific Thinking skills of their first year students. In this session we had a chance to ask them questions about this particular course, while they enquired about the best ways of including problem-oriented learning exercises in their courses. We found that the offering a required Scientific Thinking course is an important tool to make students more successful but also that the application of scientific thinking skills and enquiring attitudes might decrease over the years. Finding ways to reinforce these skills in subsequent years may be useful. One suggestion was to involve students in their third academic year in the Scientific Thinking courses as assistant facilitators.

Conclusion

Although we missed our goal of continuing in an expert way the POL group that functioned so well during the 2007 BtSM colloquium, we nevertheless concluded that it had been a useful and engaging set of meetings that resulted in increased understanding and promising continuation of the initial endeavors in the years to come.