

# IMSA PARENT ASSOCIATION ACADEMIC COMMITTEE

## NOVEMBER 14, 1998

### MINUTES

Parents in attendance: Dennis Delfert, Ev Prested, Joan Winstein, Rick & Holly Knuffman, Mike Clair, Stuart Cohen, Laura Hillman, Cathy Barnes, Gail Peck, Joanne Yoo, Hannah Suhr.

WSA Staff in attendance: Dr. Greg Sinner, Linda Torp.

The meeting was called to order at 8:35 am.

Chairperson Ev Prested introduced Dr. Sinner and he introduced Linda Torp, Director of Academic Planning & Research. She is currently helping review the IMSA academic standards and comparing them to other standards in other places.

Linda's primary topic was problem based learning. PBL was started about 30 years ago because medical schools were concerned that the best classroom students were not the best when dealing with actual patient's problems. In the traditional classroom, students are given a problem and then solve it. In PBL, the students are given a "mess" and they must identify the key elements of a good solution. Thus, the key skill is problem identification. They will use all prior knowledge including life experience to determine what else they need to know in order to identify a good solution and then come up with one. In practice, this style of learning has been very successful, particularly in longer term knowledge retention. Recent research on how the brain functions partially explains this. The more ways knowledge is linked to other pieces of knowledge and the more times a piece of knowledge is used, the longer it is remembered.

At IMSA, the first PBL course was Science, Society & the Future. It then spread to biochemistry, ecology, and genetics courses. Other courses, such as World Studies, began to use a variation of the method called Problem Centered Learning. In PCI, the problem is more defined at the beginning but may include determining why the situation is (or was) a problem. The possible solutions may also be constrained to the knowledge or capabilities of a group or time. Other courses are starting to incorporate bits and pieces of PBL/PCI.

All science curriculums at IMSA are under review. Each has strengths & weaknesses. They would like to design a curriculum that would bring together all the different strengths.

Linda also gave us some preliminary information on attitudes toward math after the IMSA experience. IMSA students of '93 were more likely than '96 to major in math/computer science areas, but the total number entering math/computer science/science areas did not change much (74% in '93 vs 70% in '96), the national norm is 25%). Also, a previous questionnaire on the math experience here was very positive. However, a minority (2 to 10% depending on the question) indicated considerable dissatisfaction. We hope that more up-to-date information will be available in the spring and that some of the sources of dissatisfaction can be more clearly identified even though only a small number of students seem to be troubled by them.

After Linda's presentation, Ev Prested brought up parental concerns about IMSA's tracking of teacher absences (class cancellations), teacher tardiness, changing of class start times, or ending classes early on a regular basis. Dr. Sinner stated that if a class was canceled, the teacher was responsible for arranging either independent study for the students or make up sessions so that the material was covered. However this does not seem to be monitored very well. In fact, it appears that in some circumstances, IMSA may not even know that a class was canceled. In addition, there is a policy stating how long students should wait before notifying the office if a teacher does not arrive for a scheduled class. However, this is not in the student handbook. Dr. Sinner agreed that maybe it should be. He also agreed to report back on the status of this problem at our January meeting.