

## Notes from IB chemistry session October 27, 2005

### Exchange of information on resources:

ISBN numbers for some of the materials were exchanged. It was noted that there is a fair discussion on the OCC site related to appropriate and useful books for the course. Most teachers using the John Green/Sadru Damji (ISBN 1-876659-41-6) felt that it was one of the easier texts to use as it closely followed the syllabus. Another workbook/study guide, *Chemistry for the IB Diploma* by Geoff Neuss (ISBN 0-19-914807-4) was said to be particularly helpful as it used expected terminology, diagrams, and reactions. Other commonly used/suggested materials include Vernier sensors and probes, the Vernier *Chemistry with Computers* lab manual, spec 20, and the Flinn polymer kit.

### Group 4 projects:

A variety of project ideas were shared. Many use a large group brainstorming session to determine the overall topic. Several teachers take field trips (water quality upstream vs downstream, lake study, factors related to a park/recreation area) involving all disciplines for the action phase, with considerable time spent during or outside of class prior to the trip for the planning phase. Other broad topics include forensics using a crime scene motif, sports, and energy. One school has open lab sessions on the weekends in which students can work on their experiments for extended periods of time in an interdisciplinary setting. Presentation strategies include in-house field trips, posters and power points. A written lab report is also submitted.

Feedback from previous training sessions indicate that the planning A from the group 4 project is not appropriate for moderation because it is not done individually. However, this is a particularly good lab opportunity for personal (a), (b), and manipulative skills. One school noted that the planning A for the group 4 project is done as a summer assignment.

### Other internal assessment issues:

Overall, teachers feel that they are receiving conflicting information regarding the types of examples that are best for moderation including which labs should be listed on the PSOW. There is also a feeling that the moderation is overly harsh—that quality student work is not always recognized as such by the moderator and that the reasons for the reduced mark are not clear.

Computer generated graphs and data tables are fine to use, but should not be submitted for moderation because it is difficult to determine an individual's input and understanding of the data represented by the graph. There was a question as to whether there is a need at the standard level to carry uncertainties through calculations. Some schools do this as a matter of course. It is to be done in HL.

Discussion of further avenues of investigation is appropriate to include in the 3<sup>rd</sup> aspect of C/E. Peer editing of labs is a suggested strategy to help students see examples of appropriate as well as inadequate work

There was debate as to the number of lab reports that should be submitted for moderation. This, too, is indicative of the lack of feedback for the teachers. Clarification on these issues is desired.

### Test strategies:

Giving past tests throughout the year and discussing the specific marking helps students become familiar with expectations. Practice exams should be given under authentic test conditions as often as possible.

Strategies for teaching the options:

Strategies for teaching the options content throughout the year were discussed. Some base the choice on student background and allow self selection and research. A lack of lab opportunities (with the exception of fuels) related to the options was a concern.

Respectfully submitted,  
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