

The main goals of this PDIG were to create a curriculum and support information for a Science Essentials class. The vision of this class was to have a cycle of the same students who will take the essential components of the grade 9 and grade 10 components, as well as foundation topics from 7th and 8th grade. This gives the students the best opportunity to pass high school science/MEES exam. Secondly, a goal was to evaluate best pedagogical practices that would be used in teaching this class.

Concerning our goals, three documents were produced that reached these goals (Google docs, shared). The first was a list of the topics to be covered throughout the two years of the essentials class (these are the “essential” topics). The second was a data base of exam style questions to be used by the teacher for midterms and finals in both years, primarily with the target to prepare the students for the MEEES exam in 10th grade. Finally, a list of resources connected with many of the essential topics which had links to good ideas to great pedagogical lessons (targeted at those who would be in the course – hands-on, student driven, etc.). This was created from ideas the teachers here have used, those consultant was aware of, or from brainstorming about teaching tougher topics (the last day, we posed the question – what is tough to teach, how can we teach this concept better than we do now?). The last document started to encompass an even greater number of topics throughout all levels in science.

Concerning the goals stated in the application...

“Our program will create a Secondary III curriculum that is based upon the essential concepts of both Secondary III and, more significantly, Secondary IV science, and use secondary III as an extra year to prepare them for success in Secondary IV” and

“The course will use the critical components of Secondary 3 science, modify the non-critical areas and add significant parts of the Secondary IV curriculum to attain this success.”

These were accomplished with the first document, and had the additional benefit of essential ideas needed from Secondary I and II, which, upon discussion, were important for the course.

Concerning the goal...

“An important component that also requires significant time is to create a three hour Secondary III final exam for this class. This should reflect the new content and should be in alignment with what is expected from students, especially when they reach the critical MEES Secondary IV final exam”

This goal was exceeded by the creation of the second document, where not only was the “final 9th grade” exam able to be created, but other midterms, along with the flexibility to help the teacher of the course.

Concerning the goal...

“But what about those who are significantly below passing, and, as students used to failure, perceive that they “need a miracle” to pass? For these, we need to think “outside the box”, which is what this PDIG application is about.”

Again, we achieved more than this stated goal by realizing that the pedagogical information provided by the third document, and actually lead beyond the scope of project (the joy of “organic” experiences with other teachers) by incorporating a “live| document” that will be a continual data base for resources and ideas on multiple concepts for all science teachers.

Even more significantly on the final point, we are a pilot school for the “deep learning” initiative by the board, and a large part of that last document is geared towards the ideas of deep learning, so now, the entire science team is positioned for success and have more resources to accomplish this goal.

Those goals that were reached, in less days than needed, defines the success of this PDIG. We are glad that this resource is available to the teachers of Quebec.