

## **Building a Modified Junior Science Program** *Some Thoughts*

Hello all,

Over the past three years one of the themes that has consistently come through our workshops and presentations is how to build a modified program for Science 8 to 10. Math starts to adapt their program during these grades and yet we expect all students to be able to meet the PLO requirements of the Science program. Since very little attention has been given to this issue as the decision makers (at all levels and organizations) have fixated on literacy and numeracy, we have tried to develop some tools to help teachers deal with the range of learners in their classrooms.

Below is an email I recently sent to a teacher struggling with making sense of how to adapt the current science curriculum to meet the needs of her students. I attempted to outline some of thinking that has gone into building the BC Science 10 program. For those of you that contributed to this summary of ideas, I thank you and hope that it represents your thoughts appropriately. For others who are seeing this for the first time, I hope it provides a basis for department discussion on how to adapt the current program to help all students succeed in your science class.

As always, comments welcome at [lionel@edvantagepress.com](mailto:lionel@edvantagepress.com).

All the best.

Lionel Sandner

\*\*\*\*\* Pasted E-mail \*\*\*\*\*

Hello .....

You ask a very good question and one that many science teachers have asked me over the past three years as we've implemented BC Science 8, 9 and 10. The short answer is we didn't start out to develop a modified program or get approval for any type of modified program.

That being said, I also recognized a need and felt we should try and put some tools together for folks to create a modified program. So, here's some thoughts on that. We've done this more at the grade 10 level, but I think it could be adapted for grade 8 and 9.

**Workbook** - aligned to Table of Contents in student book, but written at a lower grade level. The Home Version of BC Science (located at [bcscience.com](http://bcscience.com)) has the text in the workbook in pdf format so Adobe Reader can read out loud the text for weaker readers.

**Anchor Activities** - in BC Science 10 there is an activity per chapter that is called the anchor activity. These activities are considered core and doable by all students. I think doing at least these 12 activities ensures kids get a "hands on" experience in their science class. Of course I would like to see many more of the activities in the book done in every science class.

**Unit Exams** - for grade 10 we created unit exams that were based on the information in the workbook. That way kids get assessed on what they learned.

Now it seems to me, that if a student was struggling in science, the goal is to create a chance they can succeed. This means a frank conversation with the parents about what is a modified program and that a focus on key concepts, a good work ethic and positive attitude are fundamental to success. If you're OK with that line of thought then here's how we see the assessment working in a modified program:

If a student can complete the workbook assignments and the unit tests to some level of mastery - say between 75% and 80 % and they complete all the anchor activities plus any additional projects or tasks assigned by the teacher then this could be considered a Science mark of around 55% - 60%.

Again, there is no policy to back up these numbers, just the summary of many conversations with teachers from across the province. I'm not saying it's perfect, but I think it sets up an environment where a student can have success if they are willing to put the effort into their work and have an appropriate attitude in your class.

Hope this helps.

Lionel