

Minutes of 4/28 9<sup>th</sup> grade science collaborative meeting: UTC, Bangor

**Next session: Wednesday, May 27, 4:00 o'clock at Jeff Owen's house, Orono, 26 Westwood Drive**

Please note this is a change from the 20<sup>th</sup> that we had penciled in. Contact me with conflicts.

*Participation in this collaborative is open to all 9<sup>th</sup> grade science teachers.*

Present: Pat Buchanan (Hermon), Marc O'Clair (Hampden), Mike Morton (Brewer), Ben Ewing (Bucksport), Ed Lindsey (Old Town), Jeff Owen (Orono), Eric DaSilva (Orono), Kirk Maasch (University of Maine).

We exchanged a wealth of information informally over a UTC lunch: Equity as a major issue in assigning homework; ways to acknowledge and grade student work that may be more meaningful to the students; establishing or failing to establish working relationships with 9<sup>th</sup> grade students; the needs of this group in terms of social development and character development, and this as an element of the teacher's job.

In the work session, Pat Buchanan shared Vince Marzilli's (Hermon) work in creating a packet of course information that conforms to the template the State is suggesting for uniform course reporting. It was helpful to examine this and anticipate what it means for 9<sup>th</sup> grade courses where there is much curricular variety in part because schools have used these as patch courses. If we feel as though we are sinking in this process, Pat will keep us afloat. *Thank you Pat!*

Mike's endeavor to organize learning around the construction of a working trebuchet, using a modified social networking site for student sharing and contribution, continues. He is messing with the bricks and bells to be current with technology and the brains of youth. We look forward to his reflection on his experience.

Marc's use of Google Docs as the vehicle for student work, student sharing, and teacher feedback continues also. It is working and it is evolving. We look forward to his report on how well, and how differently, the approach engages the brains of youth.

Ben prompted us to discuss the Physical Science content of 9<sup>th</sup> grade courses and what may lie ahead as for the 9<sup>th</sup> grade content as schools gain experience with the Earth Science and Earth Systems Science tested by the Science Augmentation.

Ed said he was much influenced by a book: Using Science Notebooks in Elementary Classrooms, by Michael Klentschy. It lays out methods for teaching children ways to think and write that are too often undeveloped by the time students reach high school, and which hammer at the **B** standards.

Kirk Maasch commented on the difficulties people have in learning elements of atmospheric science that impede learning about weather and climate. He also shared two resources that are good for data and developing lessons on atmosphere, weather, and climate.

<http://weather.uwyo.edu> This is a site Kirk uses for many purposes, but there is weather balloon data for each day that details the vertical structure of the atmosphere above Maine. So it is a place to get numbers for students to graph and to use in forming questions about how the world works.

<http://www.ametsoc.org/amsedu/dstreme/> This is an educational site kept by the American Meteorological Society with classroom use and inquiry in mind. It can't be described briefly and it is really good. You have to go there and check it out while someone who knows holds your hand.

Eric DaSilva, an engineer, MST student, and student teacher with Jeff in Orono, presented a unit/tutorial that he had developed and deployed in the classroom on the Geographical Influences on Climate. Designed with Wiggins & McTighe in mind, focused in its expectation of student learning, it also yielded data on student understanding as the tutorial went along. Perhaps Eric can join us again to fill us in on what he's learned from analysis of the data.

When we gather next time, let us address the structure of the collaborative's work. We tried several things this year, and we want to use our time productively. So bring your recommendations and we will hash them out.