

Memorandum

To: Thomas S. Kingston, Interim Superintendent

From: Deborah Darlington, Director of Science 5-12

Cc: Bob Antonellis, BEA President
Janice Darias, Assistant Superintendent
Suzanne Lijek, Science Teacher
Pat Partridge, Science Teacher

Date: February 4, 2013

Re: Summary of Findings from the Committee to examine Science Teachers' Course Load at BHS

Introduction

A committee comprising of the Assistant Superintendent, Janice Darias; the Director of Science, Deborah Darlington; School Committee member Dan Scharfman; and High School Science Teachers Pat Partridge and Suzanne Lijek met twice this fall to discuss the transition of science teachers to the five class course load. The Committee surveyed science teachers to see how the addition of another class affected science instruction at Belmont High School. The addition of the fifth class affected science teachers' schedules in two ways: the reduction of class time by one mod (26 minutes) per week, and the reduction of prep time by five mods per week.

Effects due to loss of class time

Teachers who have been at Belmont High School since at least the 2010-2011 school year (the last year science teachers taught four classes) reported making many adjustments in their instruction to accommodate the loss of one mod (which was equal to a 10% loss in instruction time) during the 2011-2012 school year. These adjustments included

- Modifying lab time, either by dropping labs altogether, turning labs into teacher demos, or splitting the lab work up into groups, with each group contributing to the whole class data
- Spending less time on content, by having students do more on their own outside of class, shortening or skipping some units, cutting content not directly related to the MA Frameworks (and in some cases, not covering the minimum content standards in the MA Frameworks)
- Saving time by skipping review days, delivering content by lecture and eliminating inquiry learning.

Effects due to loss of prep time

Teachers reported the following changes due to the loss of prep time

- Conducting fewer “wet” labs in biology and chemistry, or labs that were changed to teacher demos (less prep needed)
- Not being able to provide as much extra help outside of class
- Not being able to provide as much feedback on assessments

Recommendations

To address these changes, the committee has recommended investigating alternate instructional models to use class time more efficiently, and the hiring of a lab-prep aide. However, the science classrooms and prep rooms are not currently organized in a way that would allow an extra person to work in them. While there are chemical storage rooms, there is very little space for lab prep in these rooms. There has been some custodial work in the chemistry classrooms and chemistry prep room to increase safety and organization. There is a request in the FY14 budget for funds to cover chemical waste disposal. In addition, a major reorganization and clean up of the chemistry classrooms and prep rooms needs to happen next summer.