

ABINGTON SCHOOL DISTRICT  
ABINGTON, PENNSYLVANIA

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SUPERINTENDENT'S  
ADMINISTRATIVE PROCEDURE

REGARDING: **Superintendent's Committee  
for Chemistry Curriculum  
and Instruction**

Section: **Superintendent's  
Committees**

Effective Date: January 8, 2015

Reissued: NEW

See Also:

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### **Background**

The current text used in the chemistry course at Abington Senior High School is Chemistry, 5<sup>th</sup> Edition, by Wilbraham, published by Addison Wesley. This edition of the text was published and adopted for chemistry in 2000. The text is now also being used in the Applied Biochemistry course in grade 10. In addition to being 15 years old and out of print, this text is not current with the rigor of today's academic standards and with the use of instructional technology. We have recently (2013-2014) revised the biology and honors biology curriculum in grade 9 to align with the Pennsylvania Standards for Science and Technology and the Keystone Biology Assessment Anchors, and we have also revised the grades 11-12 honors physics curriculum to align to the new AP Physics 1 and 2 exams offered by the College Board. These new programs also take advantage of on-line texts and resources.

The new curriculum frameworks in both AP Physics and Chemistry emphasize different areas of content than previous programs and rely heavily on an inquiry approach to science instruction. Laboratory instruction is an essential component of Pennsylvania Standards and the AP Sciences. In order to prepare students in grade 10 to access the physics and chemistry content in grades 11 and 12, it is necessary to revise the current chemistry curriculum. To do this, it is important to review instructional resources that have been developed by experts in the area of chemistry to address the current standards and made available by publishers. These resources should include a text that is up-to-date in the field as well as appropriate online resources and other applications that take advantage of the technology that is available to our students.

### **Committee Charge**

The Chemistry Curriculum and Instruction Committee is established to undertake a comprehensive review of the Pennsylvania Standards for Science and Technology, and Engineering Education as well as the standards for Environment and Ecology for Chemistry and to identify instructional materials including technology-based resources that will address these standards and provide the basis for teachers to deliver a quality curriculum. The committee will need to consider the following items on formulating a recommendation:

1. The Pennsylvania Content Standard Statements for Chemistry and the Science Inquiry Skills delineated in the Pennsylvania Standards for Science Technology and Engineering Education as well as the Standards for Environment and Ecology.
2. The Science Practices and Big Ideas identified in the AP framework for AP Physics and Chemistry.
3. Technology use in instruction and the compatibility of new resources with existing technology.
4. Professional development needs associated with curriculum changes.

### **Committee Membership**

Mr. Bradley Palmer (Chair)	Science Department Chair, Abington Senior High School
Ms. Doretta Agostine	Science Teacher, Abington Senior High School
Dr. Kathleen Fadigan	Community Member
Mr. James Lavelle	Science Teacher, Abington Senior High School
Ms. Marsha Levell	Board of School Directors Representative
Ms. Jessica Levin	Science Teacher, Abington Senior High School
Dr. James Melchor	Assistant Director of Curriculum
Mrs. Tracy Panella	Board of School Directors Representative
Ms. Janine Sack	Supervisor of Communication Arts 7-12
Mr. Ryan Williams	Science Teacher, Abington Senior High School and AEA Representative
Ms. Gwen Harpel	Parent Council Representative

### **Committee Tasks and Responsibilities**

1. Review of the Pennsylvania Content Standard Statements for Chemistry and the Science Inquiry Skills delineated in the Pennsylvania Standards for Science Technology and Engineering Education and the Pennsylvania Standards for Environment and Ecology. Review the Science Practices and Big Ideas identified in the AP framework for AP Physics and Chemistry.
2. Develop appropriate criteria and an evaluation rubric to evaluate proposed texts for Chemistry.
3. Evaluate all available texts and resources with respect to the developed rubric.
4. Recommend a text and other appropriate resources for the chemistry curriculum and instruction.
5. Propose an implementation plan that identifies needs for curriculum projects and/or professional development.

### **Timeframe**

January 2015  
February 2015

Committee appointed Tasks 1 & 2  
Tasks 3-5