



# Ohio School Boards Association Capital Conference and Trade Show

November 13 – 16, 2011

Greater Columbus Convention Center  
Columbus, Ohio

## Partnerships lead to dual credit for students

### Career education/ESC

Tuesday, November 15, 2011

9:00 a.m.

C 216

Donald Storer, professor, Southern State Community College

Glenna Rowe, teacher, Washington Court House City

Keith Brown, superintendent, Washington Court House City

Kevin Boys, president, Southern State Community College

#### Policy Services

OSBA provides a variety of services to assist you with keeping your district's policies up-to-date and reliable to all administrators including:

**Manual development** — three levels of direct assistance by OSBA specialists, tailored to meet your district's specific needs

**Online services** — Web-based conversion of policy manual with links to other policies, regulations and the Ohio Revised Code

**Update and review services** — systematic procedures for keeping policy manual current

Contact OSBA at (614) 540-4000 or (800) 589-OSBA for more information.

Please complete an online conference evaluation either during or after the event at <http://links.ohioschoolboards.org/CC11Evaluation>

#### OSBA Mission

*OSBA leads the way to educational excellence by serving Ohio's public school board members and the diverse districts they represent through superior service and creative solutions.*


#### Ohio School Boards Association

8050 North High Street, Suite 100  
Columbus OH 43235-6481  
(614) 540-4000 fax (614) 540-4100  
[www.osba-ohio.org](http://www.osba-ohio.org)

### A Dual-Credit Chemistry Class Using a Blended Delivery/Team Teaching Approach

Dr. Kevin Boys, President	Mr. Keith Brown, Superintendent
Dr. Donald Storer, Professor, Chemistry	Mrs. Gienna Rowe Chemistry Teacher
Southern State Community College Hillsboro, OH	Washington High School Washington C.H., OH

### Washington High School



- Located in Washington Court House, Ohio in Fayette County in Southwest Ohio
- 680 Students in high school
- Only 25 % attend college
- 88 % Graduation Rate

### Southern State Community College





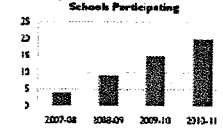
- 4 Campuses in Southwest Ohio
- 3400 Enrollment
- 4 of 5 Counties in Service Area are Appalachian




### Dual Credit Program in Chemistry

- Is considered to be an on-site PSEO (post-secondary enrollment option)
- Began by awarding introductory level chemistry credit


Schools Participating



Year	Schools Participating
2007-08	5
2008-09	10
2009-10	15
2010-11	20

### Features of Program

- Initial planning meeting with teacher input
- High school teachers required to attend a workshop
- Students come to college to do advanced lab using spectrophotometers and/or pH meters
- Program provides bus transportation and substitute
- Encourage implementation of final project



### Pilot Program (2009-10)

- Offered college-level chemistry using a blended delivery, team teaching approach
- Students received dual credit at no cost
- Students met at college 2 days/wk, at the high school 2-3 days per week. Used "flex Fridays"
- Used professor prepared tests
- Most labs occurred at college lab

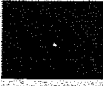
### Used Asynchronous Delivery of Online Portion

- Camtasia was used to capture lectures:
- Three types of presentations:
  - PowerPoint lectures
  - Example problems
  - Interactive Lessons

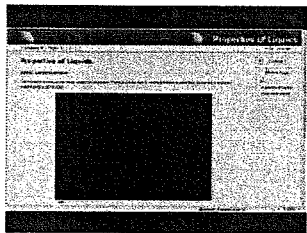
### Problem Solving

Problem 23, page 197

Amounts of  $\text{CuSO}_4$  and  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  have a ratio of 1.245 g. After heating to drive off all the water, the residue is only 0.832 g. What is the mass percent of  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  in the mixture?



### Interactive Lessons



### Final Project

- Students completed a final research project that involved analysis of soil samples from archaeological excavations at George Washington's home.



### Features of Project

- Students analyzed soils for extractable phosphorus and pH.
- Maintained a laboratory notebook of work.
- Submitted a final written report and an oral report or video documentary



- 3-dimensional graphs of data were created and submitted to the archaeologists at Mt. Vernon



### Advantages

- Students received dual credit at no cost
- Increases chances of success in college
  - 88 % vs 50%
- Advantages over AP
- Exposes students to the routine and rigors of college-level work
- Increases student self confidence
- Increases skills in technology
- Develops self discipline

### Disadvantages

- Scheduling
- High school teacher "too accessible"
- Distance between high school and college
- Requires maximum flexibility between college and high school instructors
- Role change of high school instructor
- Lab preparation

### What's Next?

- How do we replicate program with other high schools?
  - Scheduling
  - Instructors
  - Distance
- Currently have 18 Washington High School students enrolled



### Contact Information

- [kboys@sscc.edu](mailto:kboys@sscc.edu)
- [dstorer@sscc.edu](mailto:dstorer@sscc.edu)
- [glenna.rowe@wchcs.org](mailto:glenna.rowe@wchcs.org)
- [keith.brown@wchcs.org](mailto:keith.brown@wchcs.org)