

High School/Community College/University Science Curriculum Dialogue

Western Carolina University

October 14, 2008

Participant answers are listed as raw data. Some participants repeated answers and are numbered accordingly to the right of the answer.

1. What do you expect college ready freshmen to know and be able to do regarding science skills?

- Inquiry skills
- Lab skills
- Observation skills-3
- Responsibility-3
- Study Skills-3
- Scientific method-3
- Critical thinking-3
- Analytical skills-2
- Dimensional analysis
- Reading skills-5
- Content reading skills-3
- Basics of mitosis, meiosis, photosynthesis, and cellular respiration
- Math Skills-4
- Appreciation of science
- Reasoning skills
- Knows difference in cause and effect
- Knows how to link conclusions with evidence
- Science Vocabulary
- Measurement-2
- Can apply science content to real life situations

2. What do you expect pre-service teachers to know regarding science skills?

- Know and explain there is a connection between all science content (classes)
- Be aware of legal issues-2
- Maintain professional behavior-3
- Act in a professional manner
- Dress professionally-2
- Guide labs-2
- Know broad science concepts-3
- Math skills-2
- Graphing skills-2

- Help students generate new knowledge
- Be able to discuss the big picture of science
- Sequence and pace the high school science curriculum
- Work as a team
- Be able to work with data tables
- Know and use technology-2
- Know your subject content-3
- Know how to use software the school has adopted (pro-ware)
- Know that lab skills overlap
- Communicate inquiry skills
- Know and teach scientific method-3
- Be a critical thinker and teach critical thinking-2
- Be able to break concepts into small teachable “bites”-2
- Know the core high school curriculum so that connections can be made across curriculum-2
- Know probe ware and interactive physics

3. To university and community college faculty: What would you like high school science faculty to know regarding teaching this discipline at the university level?

- Math logic skills
- The EOC doesn't teach science-2
- Students need to understand plagiarism.
- Students need to be comfortable talking with college instructors.-2
- Students need to go to their professors for help.-2
- Education is the student's responsibility
- Students, turn off your cell phone
- Time management-2
- Why can't students read and think?
- Students need lab skills.
- Study skills are a must
- Students need to read for content in science.-2
- Math skills
- Logic skills
- There is rigor at the college level.
- Students need a curiosity about the world and science
- Students need note taking skills
- Students need to behave appropriately in a college classroom.
- EOC Tests hinder teaching and problem solving.

4. To high school faculty: What would you like community college and university faculty to know regarding the teaching of your discipline at the high school level?

- We must break content into small bites.
- We must boost EOC scores.
- We teach a variety of courses.-2
- We need quality in online coursework.
- Our curriculum is dictated by the state.- 2
- The science department has the most EOC tests.
- We need to align the college curriculum with the high school standard course of study.
- Dependence and discipline affect academic development.-2
- Social issues are on the rise.
- Poverty has a huge impact on education.
- A huge high school emphasis is on sports.
- First year teachers should have in-depth content knowledge.
- We teach study skills.
- Students need to think scientifically.
- We start at the level of learning to describe what students observe.
- Some students can't read.
- Online instruction needs to be more interactive.
- Students in high school are at a different emotional and mental level than college students.
- Be familiar with the NC Standard Course of Study.-2
- Align college curricula with the NC SCoS
- Students don't need to look for one right answer.
- Schools are score driven. Biology is an exit standard score.
- High school classes are heterogeneous.
- Science process
- We have 50 minutes to do pre-lab, experiment, and post-lab.
- If it doesn't happen in the classroom, it doesn't happen at all.
- We are test driven.
- EOC