

Keene State College
Teacher Candidate Preparation Program
Science

1. How have you used your data to make changes in the following areas of your program?

a. advisement practices:

With the change from three to four credit courses, new science programs were developed. The Science Educator (Sally Jean) has developed planning sheets for each of the certification areas that candidates are presently pursuing (Biology, Chemistry, Earth/Space, and General Science). These planning sheets are used during advising sessions to plan the candidates program.

b. assessment practices or tools:

Assessment #1, the Praxis II content exam, has been the most effective measure of certification content areas. The past three years have shown 100% pass rates. For teaching pedagogy, Assessment #3, the Unit Plan and Resource Packet, and Assessment #4, the Clinical Observations form, have been the most effective assessment tools.

c. curricular design:

See a above. Assessment #2, the NSTA Content Tables helped guide the content majors are the programs were redesigned. Also, the new Secondary Education program was developed to strengthen secondary education across the entire unit.

d. Other:

2. How do evaluation instruments and feedback from pre-service candidate and partners (formative/summative) directly inform your program design and delivery?

Many of the Assessments (#3, #5, #6, #7, #8) are based on candidate's input. Assessment #4, the Clinical Observation, is also a requirement of both the Methods' and Student Teacher s' teachers. Interaction with the candidate, cooperating teachers, and the college supervisor strengthen the program. Assessment data from all eight assessments are scrutinized during the academic year in order to address any areas that need further attention.

3. How is technology used in your program curriculum---

a. to gather data and inform curriculum

TK20 has just begun. We are looking forward to having a universally and place for all the assessment data. Previously, the data has been collected and recorded on spreadsheets by individual faculty members and SPA writers.

b. to engage our pre-service candidates by modeling best practices in our classrooms

In science, technology is a must...from media knowledge to running high-tech instruments in their science classes.

c. to inform the curriculum design and pedagogy with students in the field?

Often our Science Methods and Student Teachers will borrow portable instruments (barometers, anemometers, Hach kits for environmental work, etc.) to bring into their classrooms to their students. All of the student students are Microsoft savvy (Word, Power Point, and Excel). Although Smart Boards are now in the Keene public school system, we could use one in the Science Education room for demonstration purposes.

4. For your program, please list all forms of technology used to develop and / or reinforce content mastery for our pre-service candidate and in service candidates

Besides the constant use of Microsoft Office, Science students are exposed to high tech instruments in all of their content specialties: Biology has DNA analysis instrumentation, Geology has XRF, Chemistry has MSGC, AA, HPLC, IR. The Sciences at KSC are well supplied with high-tech instrumentation.

5. How have you made program adjustments and changes through the examination of dispositional data (include unit and SPA related dispositional data) for our candidates over the past three years?

Although Science candidates do have to complete self assessment using the Disposition Form, and both Methods and Student Teacher cooperating teachers are required to fill out the Disposition Form, it is not one of the eight NSTA/NCATE assessments. In Methods and Student Teaching, dispositions are discussed and any problem is quickly noted and corrected as evidenced in their professional demeanor while out in the field.

6. If you did not provide student work samples demonstrating "did not meet" quality, please explain why:

This probably sounds presumptuous, but the Science candidates are top students in their content majors and bring that commitment to their education classes. They have excelled in their Methods and Student Teaching experiences.