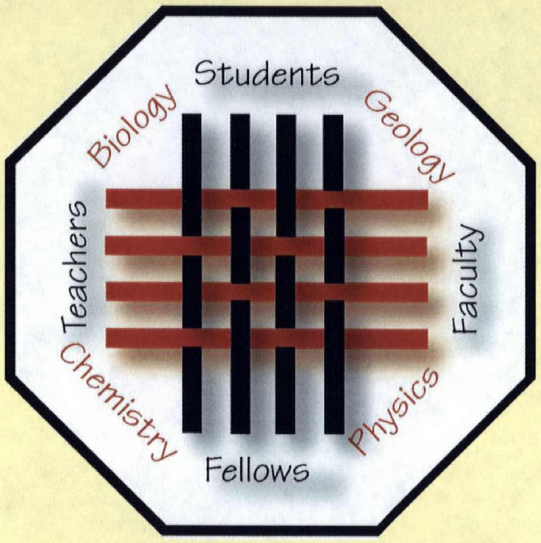
GK-12
Division of Graduate Education



Program Description

- 11 fellows: MS & PhD students in chemistry/biochemistry, biology, geology, physics
- 11 middle school science teachers: Las Cruces, Gadsden, and Hatch Districts, one private school
- 4 faculty mentors
- Fellow-teacher pairs developed and taught interdisciplinary, inquiry-based middle school lessons
- Fellows were visiting scientists one day each week in the classroom
- Faculty mentors collaborated on lesson development
- Evaluator from the College of Education

Interdisciplinary, Inquiry-based Science Learning

- Lessons must involve at least two of the four disciplines
  - "seeing" the chemistry in a geology lesson
- Lessons must be inquiry-based, at least in part
  - Difficulties of teaching by inquiry
    - Time
    - Facilities and supplies
    - Intellectual challenge (content knowledge)

Impact on Graduate Fellows

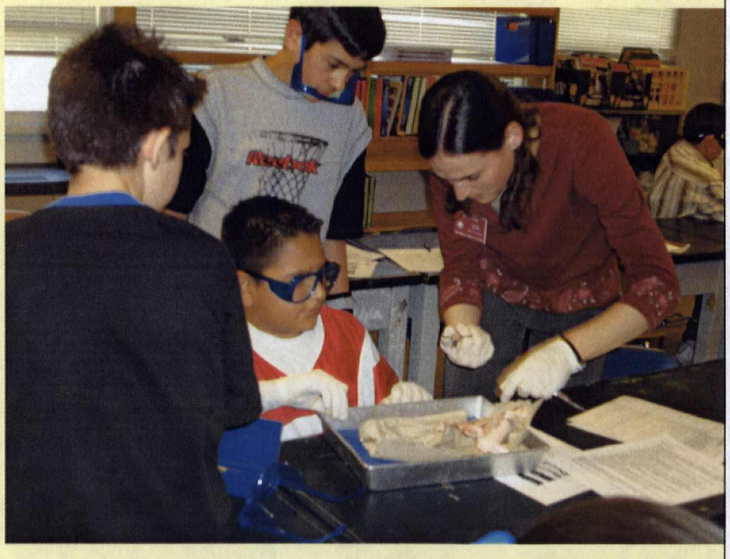
- Broaden science content knowledge while deepening knowledge in major discipline
- Deepen knowledge of science as a process
- Increased communication and organizational skills

Impact on Teachers

- Increased science content knowledge
- Increased understanding of science as a process
- Invaluable opportunity to "walk alongside" a scientist
- Increased comfort with teaching by inquiry

Impact on Students

Learning science from a scientist!



Impact on NMSU

- Relationships between science departments
- Relationships between science content departments and the College of Education

Long-term Effects

- Radically changed my attitudes about K-12 education; opened communication about science education with the College of Education
- Development of M.A. Teaching Science for K-8 teachers
- Toshiba America Foundation Grants
- Searching for ways to institutionalize a GK12-like program at NMSU