Moving Scholarly Activities into a 2-yr College Setting

On the Cutting Edge: Preparing for an Academic Career in the Geosciences
June 2011

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What are the benefits and challenges at 2-yr-colleges?
BENEFITS If we conduct "scholarly activity" it's usually only pushed for by ourselves and thus we can do exactly what we want!

DRAWBACKS But what we want to do will require a lot of effort on our part to find funding and resources not readily available AND a college that supports us.

What does SCHOLARLY ACTIVITY mean for 2-year-college faculty?

Scholarly activity includes:

- **Research**
- **Writing**
- **Outreach**
- **Professional Service**
- **Curriculum Development**
- **Community Service**

More details:

- Teaching K-12 teachers & students
  - Placement of student interns
  - Recruitment of majors
  - Recruitment of teachers
  - Teacher training
  - Loaning or donation of materials
  - Shared curriculum development
  - Basic skills and preparation
  - Making field trips more accessible
- Teaching colleagues (2-year and 4-year)
- Collaborating with other 2-year and 4-year college departments (programs, curriculum, field trips, guest speakers)
  - Placement of student interns
  - Research and job experience
  - Recruitment of Majors
  - Incorporation of research data into classroom
  - Funding for classroom data collection
  - Sharing resources (seminars, materials, etc.)
- Collaborating with research groups (non-PI assistance and/or student involvement)
  - Placement of student interns
  - Recruitment of Majors
  - Education in local issues
  - Incorporation of research data into classroom
  - Funding for classroom data collection
  - Research and job experience
- Hosting booths at local fairs; participating in Earth Day.
- Having an open house.
- Giving public science talks.
- Assisting in community science workshops (especially those for young children and minorities)
  - Development of curricula

    - Loaning or donation of materials
    - Recruitment of majors
    - Training workshop leaders
    - Placement of student interns
    - Public education
    - Community building
- Assisting the media (television, internet, radio, newspapers)
    - Hosting programs or blogs
    - Presenting on programs or blogs
    - Writing articles
    - Providing expert advice or interviews for writers on natural hazards, natural resources, pollution or environmental issues, etc.
- Providing resources to local museums and aquariums.
    - Placement of student interns
    - Loaning of display materials
    - Development and leading of local field trips
    - Assistance with display design
    - Assistance with curricula
    - Brown-bag lectures
- Collaborating with local/state/national park programs (leading field trips, teaching community classes, providing resources, producing curriculum)
- Developing or assisting with educational workshops (AGU, GSA, SERC, etc.)
- Getting involved with local political groups (energy, waste, environmental issues that pertain to Earth Sciences)
    - Providing expert advice
    - Recruiting resources
    - Calculating statistics
- See Robert H. Blodgett's list at end of this document for more suggestions

It's not required, so why do it?

We're not paid for it… so what other motivation exists?

- Makes us feel like good humans / citizens by giving us an opportunity to share our skills
- Gives us a chance to enjoy other pleasures
- Potentially allows us to impact our own community in positive ways
- Increases science education of community
- Satifies our desire for service
- Fulfills our sense of professional responsibility
- Keeps us excited and interested in our field of study
- Makes our job more fun
- Increases recruitment! (Especially for brand-new campuses)
- Gives ourselves and our department/school a better public profile
- Creates networks that will facilitate future research projects for students (projects that have local relevance!)
- Expands our views beyond my limited institutional environment
- Connects ourselves and our department with our town (improves relations!)
- Exposes underrepresented groups to Earth Science
- Increases visibility of the institution within within the community
- Can involve our students (giving them hands-on experience and helping them gain confidence).
- Provides resources for our students (internships, jobs)
- Educates the community on local environmental issues, especially policy makers
- Strengthens relationship between college and leaders
- Encourages more interest in teaching in the community
- Can connect with service-learning or mentoring programs and potentially fund students
- Attracts money from private and public donors

- Builds better relationships with local landowners (facilitates field work)
- Advertises expertise of our department as a future resource
- Provides resources and professional development to K-12.
- Improves our own education and teaching
- Makes our own classes more relevant and interesting fo our students
- Engages our students

TIPS

1. Make the scholarly activity a partnership. Work is shared!
2. When approaching organizations and people, be sure your project is one that will save them time or make their job easier.
3. Look to good models within your own department, other departments, other colleges, or the organizations that interest you.
4. Start with an existing program (such as GLOBE – global learning and observation for the betterment of the environment – worldwide protocol for how K-12 students can collect data)
5. Network. Network. Ask.
6. Match your interest with departmental/college goals.
7. Be realistic about time you can commit.
8. Look to private companies and local foundations for funds. Look everywhere. Admissions. Deans. Public Utilities.
9. Look to your students for ideas and support (especially regarding time).

Ideas for Remaining Professionally Active as a Geoscience Professor at a 2-Year College

Robert H. Blodgett
Austin Community College
June 1, 2005

Publication

- Write a popular book or guidebook about the local geology
- Write a guidebook and lead a field trip for a local/regional geoscience society
- Contact publisher's representatives about writing a study guide, lab manual, textbook, or multimedia exercise
- Volunteer to write book reviews for a professional journal

Professional Service and Visibility

- Chair a session at the annual regional or national meeting of the:
  - National Association of Geoscience Teachers (NAGT)
  - Geoscience section of the state academy of sciences
  - Geological Society of America (GSA)
  - American Geophysical Union (AGU)
- Volunteer to serve:
  - As an officer of a professional society
  - On a NAGT, GSA, AGU or other professional society committee
  - As a journal reviewer
  - As a judge for speakers or poster-sessions

Curriculum Enrichment

- Purchase, set up and maintain a seismograph from the Incorporated Research Institutions for seismology (IRIS) - http://www.iris.washington.edu/edu/AS1.htm
- Become part of the GLOBE program - http://www.globe.gov/globe_flash.html
- Establish and maintain a campus weather station – possibly in conjunction with a local television station
- Ask the county soils office of the National Resources Conservation Service (NRCS) to take cores of the soil on campus and mount those cores for classroom use
- Ask a local well driller, quarry or mine to donate their services to drill a well on campus and take core or use it as an observation well

- Ask a local surveying firm to donate their services to establish a High Accuracy Reference Network (HARN) station benchmark on campus
- Ask a local landscaping firm to donate boulders of various rock types for landscaping on campus
- Ask a local stone supply firm to donate small polished or unpolished slabs or broken pieces for classroom use

Departmental Visibility

- During Earth Science Week (http://www.earthsciweek.org/) and or Earth Day:
    - Show geoscience videos (NOVA, National Geographic, etc.) with popcorn and a Q & A session afterwards
    - Prepare a bulletin board or display for the library, cafeteria, student lounge or main administration building related to the annual topic
    - Lead a field trip for any interested students
    - Lead a mineral or fossil collecting trip for any interested students
    - Jointly host a GPS geocaching exercise with the geography program http://www.geocaching.com/
    - Have the mayor/city manager/governor issue an Earth Science Week
    - declaration
    - Hold a rock/mineral./fossil identification event
- Prepare a brochure for your research program or the entire geoscience program
- Develop a geoscience program Web site
- Have art students paint an Earth systems mural on campus
- Have photography students take/display pictures of local rocks/minerals/fossils
- Mount and display geologic maps in the hallway
- Have students create a permanent mineral/fossil display
- Prepare a geoscience current events bulletin board with Web graphics

Community Service

- Have students give geology lessons in elementary or middle/junior high classes
- Lead a geology field trip for school teacher in-service training
- Give a talk to the local rockhound group
- Conduct a book drive with geoscientists in the community to donate or buy geoscience books for the local library and schools
- Have your environmental geology class do a source-water protection survey (watershed or wellhead protection) for the public water supply system
- Have students work with the county extension agent to distribute information to homeowners about testing and protecting their private water wells
- Have students work with science teachers to get their schools involved with the Globe Program - http://www.globe.gov/globe_flash.html
- Collect science textbooks and ship them to a college in a developing nation
- Volunteer to judge the local science fair
- Volunteer to participate in on a school district science curriculum committee
- Have students volunteer with the local US Power Squadron to survey USGS/NGS benchmarks - http://www.usps.org
- Have students work with local scout troops on geology merit badges

Consulting

- Become a licensed geoscientist
- Do subcontract work for a consultant
- Review textbooks and other educational media
- Prepare test questions or score standardized tests