Urban Environmental Excursions

Field trips to connect urban geology students with the world around them

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Urban Students, Urban Issues: Opportunities and Challenges for Teaching Geoscience Courses
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Motivation
(Why organize an urban field trip?)

1. Attempt to attract and engage more students.

2. Opportunities to connect course content with the “real world.”

3. Provide a chance to experience and discover a side of our city that most students never see.
Our Traditional Model

• Voluntary One-Day Field Trip on a Friday or Saturday to look at rocks in Canada
  – Fossil collecting
  – Sand Dune
  – Oil Field

• 20 students (out of 400) sign up
• 10 to 12 students show up
• We go and have fun!
Our Revised Model

• Voluntary One-Day Field Trip in Detroit on a Friday
  – Practical
  – Relevant
  – Local

• 40 students (out of 400) sign up
• 30 students show up
• We go and have fun!

“Urban Environmental Excursions”
Field Trip Themes

- Air Quality
- Water Quality
- Energy
- Economic Development
- Brownfield Redevelopment
- Environmental Justice
- Waste Disposal
Curricular Connections

- Greenhouse gases, global warming, climate change
- Surface water, groundwater, water supply
- Sources, transport, and fate of environmental contaminants
- Urban development, watershed management, flood control
- Fossil fuels and alternative energy sources
- Solid and liquid municipal waste disposal
- Geologic hazards and engineered solutions
- The role of science in economic and political decision-making
- Geoscience and Environmental Careers
Curricular Connections
If you run it, will they come?

Promotion Helps!

• Catchy Name
• Field Trip Flyers
• On-line Announcements
• In-Class Announcements

“TOXIC TOUR OF DETROIT”

Urban Environmental Excursions
Safety First!

1. **Field Trip Policy**
   - Health Forms
   - Liability Release Forms
   - Field Trip Policy Forms (the rules!)

2. **Supply necessary Equipment**
   - Hard hats, safety glasses, ear plugs, etc.

3. **Tap into the Safety Ethic of the places you visit.**
Invite More Advanced Students

What happens on the bus can be just as important as what happens at your scheduled stops…

- informal discussions
- socialization
- attitude sharing
- peer mentoring
- recruiting
Field Trip Guidebooks

*concise*

Facilitate Learning with a Guidebook

- one-page summaries
  
  - pictures
  
  - questions to ‘prime the pump’
  
  - supplementary info on the back

- include a map
I liked the field trip a lot. It's always nice to experience new things and learn in an “on-site” location. Plus, the places we visited are places that many students would otherwise never get to visit.

The field trip was beneficial. It helped to put the subjects into perspective and relate it to real life.

I really enjoyed the field trip to DTE, Marathon, and Waste Management because it made the lectures come to life. There is nothing better than seeing the practical application of everything we’ve learned in the classroom.
Getting out of the classroom...

Field trips provide opportunities for:
- all students to learn
- interpersonal interactions
- enhanced communication
- shared experiences
- fun!