

Mining reclamation through service-learning: case studies from Wisconsin

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UNIVERSITY OF WISCONSIN
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rec
RECLAMATION
PROGRAM

What is service learning?

“Service experience that meets community needs and enhances content learned in the classroom”

(Corporation for National and Community Service 1990)

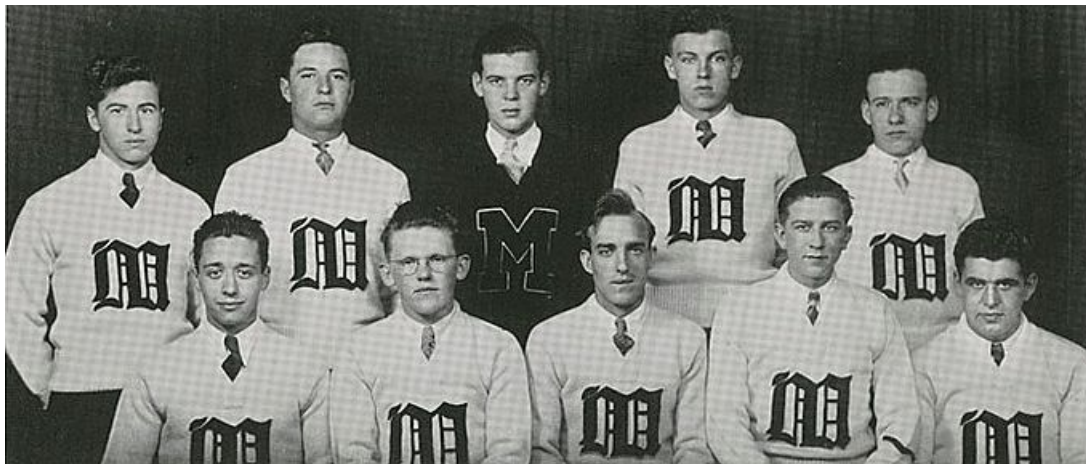
“Any service experience with clear learning goals that students actively reflect on”

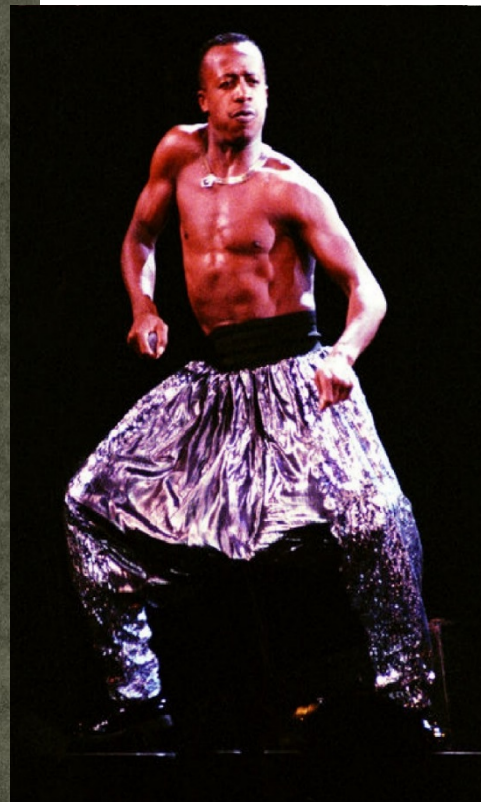
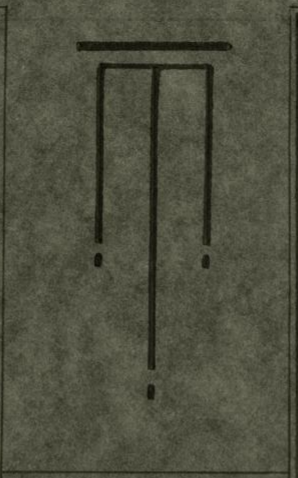
(National Society for Experiential Education 1994)

“An approach to teaching and learning in which students use academic knowledge and skills to address genuine community needs”

(National Youth Leadership Council 2015)

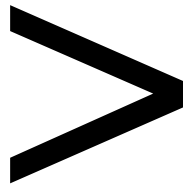
University of Wisconsin-Platteville

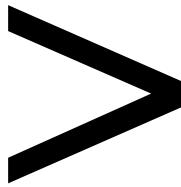












Two servicing-learning projects

Reclamation Project Management

2015 spring
senior-level
16 students

Project: Reclamation plan for
12-hectare Breezy Point
nonmetallic industrial sand mine

Partner: Buffalo County Land
Conservation Department

Reclamation Revegetation

2016 spring
junior-level
28 students

Project: Revegetation
plan for an abandoned
sand and gravel quarry

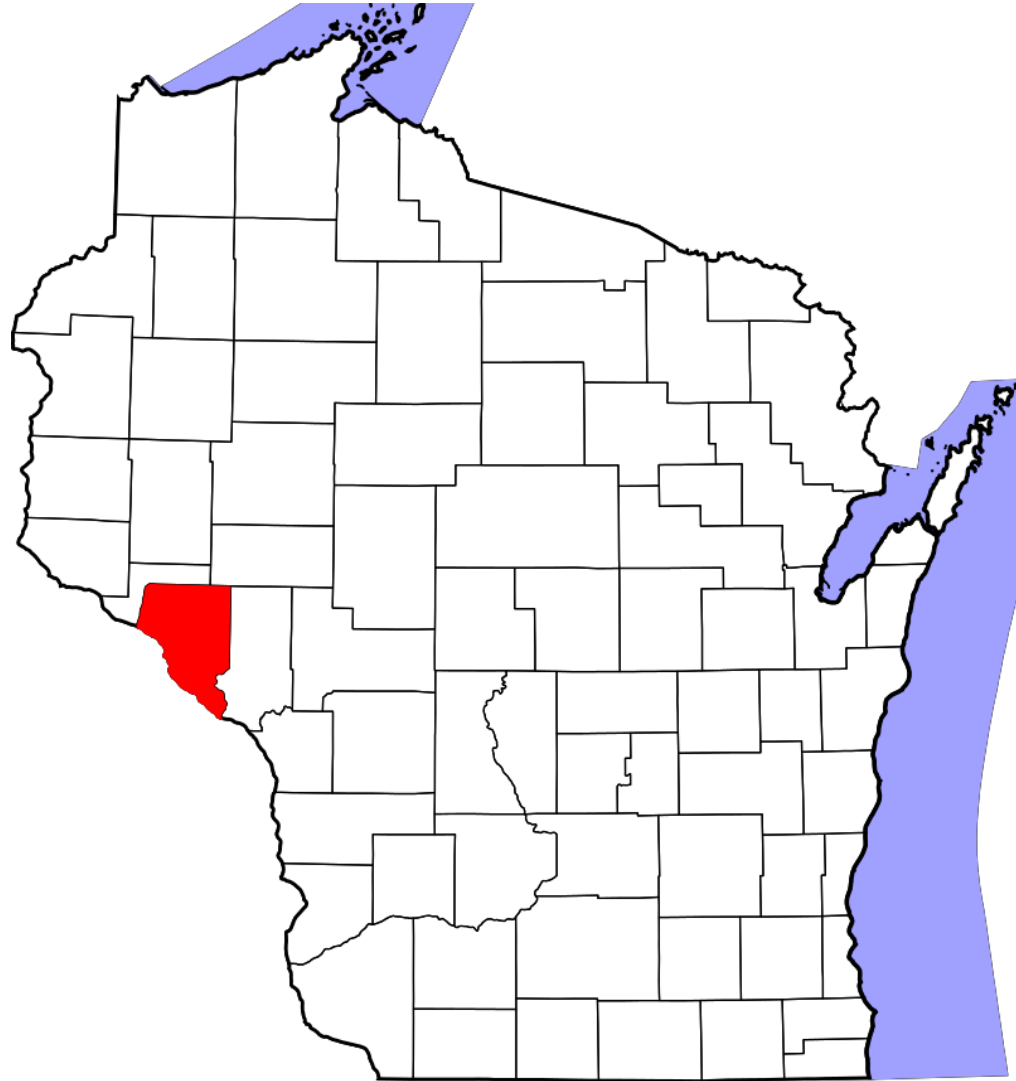
Partner: Private
Landowner

Breezy Point project

4 teams of 4 students

County Conservationist chose a more difficult “problem” project than we had originally discussed

During presentation to class, County Conservationist emphasized local regulatory authority which was unique across the state



Breezy Point project



Located in the heart of the
Driftless Area

OAK OPENINGS
PLANTINGS ON BERM

TREE THINNING-
SUNLIGHT FOR
NEW GROWTH

NON-NATIVE
SPECIES REMOVAL

LOWER BENCH
VARIES

UPPER
BENCH
15'

8'
BERM
VARIES

TRAIL
VARIES

ELEV=1100±

ELEV=1085±

DITCH

ELEV=1050±

DITCH







Breezy Point project

Lessons learned

1. Difficult to create a plan for a site students hadn't visited
2. Student interest impacted quality of results between teams
3. Students were smarter than they gave themselves credit for

Abandoned quarry project

Landowner was open to any potential ideas, but wanted to improve aesthetics and wildlife habitat

Students to create revegetation plan and help with planting trees/sowing seeds



Abandoned quarry project









Lessons learned for educators

1. Be flexible and expect projects to change
2. Have realistic expectations for project goals and deliverables
3. Leave enough time to give students project evaluation and feedback and the allow time for revision & class discussion

Lessons learned for future community partners

1. Be patient with students; they are usually taking other classes and working
2. Not all students taking a class are majors; expect quality to vary
3. Try to focus on the win-win and not just what's in it for you; students don't like to feel exploited
4. Reclamation (and restoration) can be done via service-learning.

