A New Collaborative Model for Geospatial Technology Education in a Rural Region

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

NSF

Maine Community College System

A New Collaborative Model for Geospatial Technology Education in a Rural Region

KVCC
Kennebec Valley Community College

University of Southern Maine

Washington County
COMMUNITY COLLEGE

UMA
University of Maine at Augusta

SOUTHERN
MAINE
COMMUNITY
COLLEGE

THE UNIVERSITY OF MAINE AT
MACHIAS
Naturally!

Maine Geospatial Curriculum Consortium

KVCC
Kennebec Valley Community College

University of Southern Maine

University of Maine at
PRESQUE ISLE

Washington County
COMMUNITY COLLEGE

UNIVERSITY OF MAINE
FORT KENT
UNIVERSITE DU MAINE

SOUTHERN
MAINE
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COLLEGE

UMA
University of Maine at Augusta

UNIVERSITY OF MAINE
UMF
FARMINGTON
MAINE'S PUBLIC LIBERAL ARTS COLLEGE

THE UNIVERSITY OF MAINE AT
MACHIAS
Naturally!

Project Partners & Advisors

- Maine GIS Users Group
- Maine Office of GIS
- CREST CCLI Project
- Maine Dept. of Education
- Maine Learning Technology Initiative
- Maine GeoLibrary Board
- Maine State GIS Stakeholders Group
- Maine Emergency Management Agency
- Center for Community GIS
- Maine Geographic Alliance
- Maine Land Conservation Alliance
- Maine Association of Planners
- Maine Municipal Association
- Maine 4H Extension
- Greenland Point Center
- Maine Sea Grant
- Maine Dept. of Marine Resources
- ESRI, Inc.
- Partnership for Environmental Technology Education (PETE)
- AgrowKnowledge
- Marine Advanced Technology Education Center

A New Collaborative Model for Geospatial Technology Education in a Rural Region

Rural areas & small schools have unique challenges & mandates...

We serve primarily ancillary users

Applications of geospatial technology are different

Schools, businesses, organizations & agencies are smaller

Emerged from national discourse on the future of geospatial technology education &

Maine University System Geospatial Technology Consortium

A New Collaborative Model for Geospatial Technology Education in a Rural Region

Four initiatives:

- Workforce Study
- New Programs & Curriculum
- Outreach & Student Competition
- Virtual Geospatial Technology Institute

The Promise of Collaboration

- Each partner contributes unique perspectives, skills & resources
  - CCs: Workforce knowledge, applied & adaptable curricula
  - Univs: Research capacity, grant mgt experience, infrastructure teacher education programs
  - K12: Innovative curricula, key to broad adoption of GIS, future students
- Sharing resources is more efficient, esp. in rural areas
- Broader curricular offerings
- Broader geographic reach & diversity

The Challenges of Collaboration

- Different educational goals & priorities
- Different institutional structures, course numbers, etc.
- Trust & respect issues
- Stereotypes
- Reluctant administrators
- Time & money

Overcoming challenges

- Articulate common & overlapping goals
- Find creative ways to articulate & share resources
- Follow through with commitments & agreements
- Carefully foster trust & respect
- Professional collaboration, social interaction & sharing of strengths
- Inform administrators (hint: money can be very informative)
- Find resources & mechanisms to provide time & funding for collaborative activities

New Programs & Curriculum

- Shared AS degree at WCCC/UMM
- Certificate, minor and ES/ GIS at UMM
- Certificate & AS degree at KVCC
- Hydrography and GIS curriculum at SMCC
- Courses & revisions in existing programs
- Efforts to reach out to other disciplines

Articulation & cooperation to improve retention, mobility & efficiency

Outreach & Student Competition

- Marketing plans for geospatial technology programs
- Outreach to high school teachers & counselors
- Outreach to faculty in related disciplines
- Annual competition co-sponsored by MEGUG
  - Undergraduates & high school students
  - Poster & GIS/GPS events judged by GIS pros
- Scholarships & prizes
- Workshops & support for teachers

Moving students into college geospatial technology programs

Outreach

- Marketing materials
- Workshops
- Internships
- **K12 Initiatives**

GIS Day &
Kids Camps

Championships

- Support & assistance for teachers
- Spring Events
  - Poster Session
  - Geocache Event
  - Fun in the Lab
  - College & Career Development

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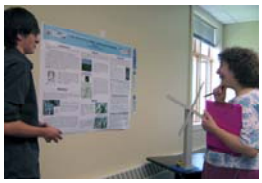
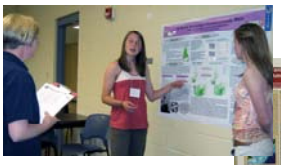
SCHOLARSHIPS!





Supplemental Award

- Mobile laptop lab for teacher training
- Maine Learning Technology Initiative
- Laptops for all 7th to 12th graders
- Critical need for training & technical support

Curriculum Development, Data Bundle & Support Materials

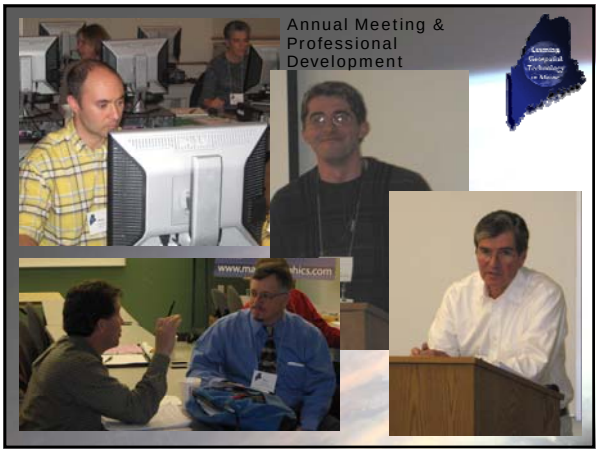
- Americorps Volunteer
- Center for Community GIS
- Maine Learning Technology Initiative

Virtual Geospatial Technology Institute

- Annual meetings with workshops
- Collaborative research
- Collaborative education programs
- Sharing expertise and resources
- Planning for the future

Building on the University System's Geospatial Technology Consortium

Annual Meeting & Professional Development



Workforce Study on Education Needs

- Focus on ancillary users in a variety of fields
- Focus group interviews
- Survey research
- Including...
  - Employers
  - Current users
  - Current non-GIS users

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