Date

Administrator Name
School/District Name
Address
Town, State, Zip

Dear Administrator Name,

A team of teachers from your district has applied to participate in a program called *Incorporating GIS in the Curriculum* that is a component of the 2008-2009 Christa McAuliffe Sabbatical Project. The teachers applying for the program are (insert names) In order to be considered as one of the five teams selected, your agreement to support their participation in this project is required.

GIS (Geographic Information Systems) and other geospatial technologies have changed the way that people interact with geographic information. GPS units in cars, Google Earth, and web mapping are all examples of ways that geospatial technologies are being used every day. GIS technologies are currently being integrated in many fields—geography, history, sociology, environmental science, business, health occupations, emergency and infrastructure management, and planning. According to the US Department of Labor, geospatial technologies is one of the three fastest growing industries.

GIS has the ability to transform education. In a survey of teachers who own GIS software, 88% of the teachers believed that the use of GIS made a significant contribution to learning by providing real-world relevance, encouraging the integration of different subjects, providing an exploratory skill, and enhancing learning and motivation. In a controlled experiment with geography classes, students using GIS scored significantly higher than their counterparts who were taught with more traditional methods on tasks requiring them to synthesize, identify, and describe reasons for human and physical patterns. Case studies have shown that GIS tends to stimulate students who learn visually and reach students who are not traditional learners. Communication patterns among students and between students, teachers, and local community resources were altered through GIS-based projects. In addition, the use of GIS has been shown to enhance spatial thinking. A recent National Research Council report states: "We suggest that spatial thinking is at the heart of many great discoveries in science, that it underpins many of the activities of the modern workforce, and that it pervades the everyday activities of modern life."

By volunteering to participate in this program, the teachers commit to becoming familiar with basic GIS concepts and techniques and to implementing at least three GIS-based lessons with their students which meet curriculum objectives or standards and that teach content, concepts, or skills from their curriculum. In addition, (insert name), has agreed to function as the team coordinator and also participate in a summer course on *Designing Engaged Learning Projects with GIS* which will allow for further development of GIS skills and the planning of challenging, real-life, student-directed, collaborative tasks that will utilize GIS technologies to analyze, synthesize, and communicate. By participating in this course, (insert name) will gain the skills necessary to be a resource person for the other teachers in the school who wish to implement GIS.

As participants in this program, your school will receive significant support and assistance for the implementation of GIS and other geospatial technologies. This support will include

- A one-year school site license for ESRI's ArcGIS 9.x software for educational purposes. This site license allows for the installation of the software on every computer in the building and on the home computers of participating teachers. (Retail value $1500 per station) In addition, participants will receive information on how they can obtain a permanent license for the software for free by completing a Community Atlas project.

- ESRI's *Our World* education resource books
  - *Thinking Spatially Using GIS* (for elementary and middle schools)
  - *Mapping Our World with GIS* (for middle and high schools)
  These books include a collection of highly tested lessons appropriate for many content areas.

- ESRI's *Getting to Know ArcGIS Desktop:* a resource book containing conceptual material and software exercises that allow users to acquire GIS software skills.

- New Hampshire specific data from GRANIT--NH's GIS data repository

- Customized support for the team of teachers to be provided at their school. This support would include
  - an initial visit to discuss goals and technology access
  - assistance with software installation (if desired)
  - assistance in locating high quality lessons that meet desired objectives
  - modification of published lessons to better meet school needs
  - classroom support when first implementing lessons with students (if desired)

- E-mail and phone support

- Additional professional development offerings to provide opportunities for expanding GIS skills.

I hope you agree that this program has the potential to enhance education in your school and are willing to support these teachers and facilitate the implementation of these technologies if they are one of the teams selected to participate. The final component of the team's application is a letter of support from their administrator. **Would you please e-mail me a brief letter indicating your support and how you believe this program could enhance education and complement current initiatives at your school?** My e-mail addresses are iahern@NHEdGIS.org or iahern@prhs.sau48.org.

If you have any further questions about the program, please contact me via e-mail or by phone (School: 536-1444 ext 1201 or Home: 536-8104). Thank you.

Sincerely,

Ina Ahern
2008-2009 Christa McAuliffe Sabbatical Fellow
Science Teacher
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