

DELAWARE GEOGRAPHIC ALLIANCE NEWSLETTER

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ALLIANCE ANNOUNCES 1995 SUMMER INSTITUTE

The highly successful Alliance Summer Institute will again be offered. This year, the Institute will begin on June 18, with the first week held at the Virden Center in Lewes. After a day off on Saturday June 24, the Institute will reconvene in Newark on the UD campus and will end mid-afternoon on June 30. The Institute is residential and essentially cost-free to Delaware public school teachers. All K-12 teachers who expect to teach in a Delaware public or private school in 1995-96 are eligible to apply for the 24 available places. Participants receive four graduate credits from the University of Delaware and over \$300 of materials to aid in teaching geography. As previous participants will tell you, the Institute is intensive - there is little time for anything else - but also rewarding. We share numerous geography teaching lessons and strategies, delve into the academic content of geography, and explore numerous nooks and crannies of the State in over 40 hours of field analysis.

This year's theme, **Teaching Geography: From the Standards to the Classroom**, recognizes the interest in curriculum building, developing performance tasks, and creating teaching units which respond to the new state standards. Institute participants should obtain substantial support to address these issues.

The Institute is also a lot of fun. We meet in a relaxed atmosphere, most of the instruction is by fellow Delaware teachers, there are various social events, and plenty of opportunities to interact with colleagues. More information and an application form is bound in the center of this newsletter. Plan on applying early!

MAPPING BY COMPUTER

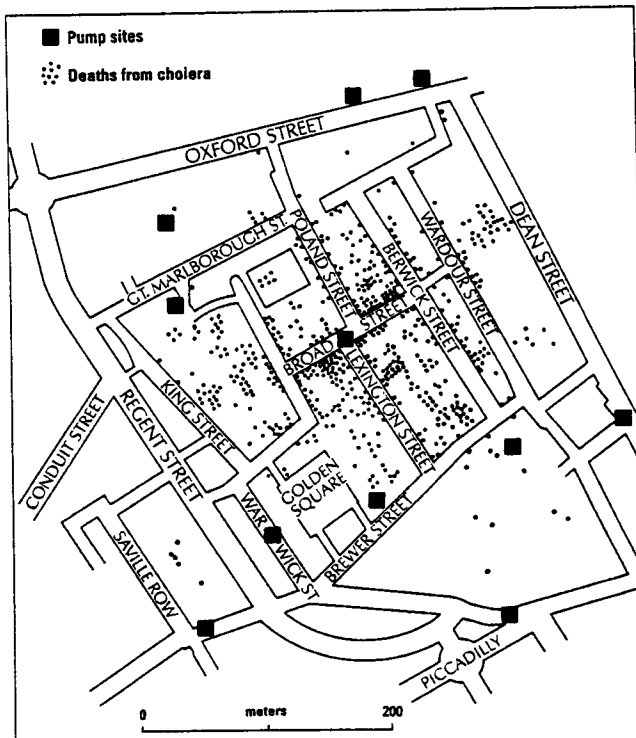
Making maps used to be a long and tedious process. First, the data needed to be collected and converted into a geographic form. Then a base map would have to be drawn by hand, the data displayed in some type of dotted, shaded, or colored symbols of the correct scale, and finally place names would have to be hand-lettered. If multiple copies of the map were needed, an additional complex set of problems involving matching up several different photographic plates would be required.

No wonder maps were often hard to find, and when most people needed a map, they went to a gas station, an Atlas, or, if they were keen hikers, the United States Geological Survey's quadrangular series. In all these cases, the maps most people used showed a combination of topography, physical features such as rivers, and human features such as towns, roads, and political divisions.

These maps helped people "find their way" and they could sometimes help conjure images of far away places. But they didn't really help with geographic analysis - gaining insights about the world and its people in terms of where they were found. For instance, the famous geographic analysis of Sir John Snow, Queen Victoria's physician (shown on the next page). He plotted as dots on a street map the occurrence of cholera in a London neighborhood. The analysis part was the dot pattern which resulted. It showed a tight clustering of dots around a community water pump. Sir John had the handle removed and the local epidemic abated, confirming his suspicion that cholera was somehow spread by infected water. The type of map Sir John used was a thematic map.

In the past six years or so, computers have revolutionized map making. Now, all of a sudden, software packages have been created which allow

Map of Cholera Deaths and Locations of Water Pumps



NGS Publications Art

us to map large data sets and then play with analyse?) the result. For instance, we recently saw a demonstration in which a data set containing lists of addresses of geography teachers across the U.S. was displayed on a computer screen as a series of dots on a U.S. map. One section of the country was then enlarged, a teacher chosen at random, and commands given to identify all other teachers within a thirty mile radius of the teacher chosen. Instantly, the computer screen produced a line extending from the chosen teachers home equal in scale to thirty miles, drew a darkened circle, and calculated the number of teachers who fell within the circle.

This sort of map production and geography analysis is called **Geographic Information Systems** or **GIS**. It is an exciting new field and one which is rapidly being adopted by numerous businesses and government agencies. For school students, it promises to enhance their interest because their apparent natural affinity for computer

images and manipulation can now be applied to practical issues and problems.

On **Saturday, February 11**, the Alliance is sponsoring an all-day introductory workshop on the use of **ArcView**, a program specially developed for education which will allow students to collect their own data, map it, and follow up with their own analysis. ArcView turns their classroom computer into an interactive research station, using real information about real places, past and present. With the click of a button students and teachers can pose questions and see the results in color-coded maps, charts, and tables. Students can investigate relations and patterns among items such as population, historical development, physical geographic characteristics, and socioeconomic qualities. They can join data sets together, link photos, text, and graphics to specific locations, and conduct "virtual field trips" of exploration without leaving the classroom...all on a desk-top computer.

The workshop, **Computer Mapping and Analysis in the High School Classroom: An Introduction to ArcView Geographic Information System**, will be presented by **Charlie Fitzpatrick**, a former teacher and now head of the K-12 education effort of Environmental Systems Research Institute. Charlie is a dynamic and engaging guide to this new form of geographic learning.

See the registration form on the inside back page of this newsletter for further details.

ANOTHER SOURCE OF SOFTWARE

Trip Software has a good catalog of shareware educational programs. No program from their *Geography & History Computer Programs* catalog costs more than \$4.00. You can then evaluate the program, and if you decide to use it, send a registration fee to the author. Programs in the catalog, which costs \$2.00, range from "Earthwatch", that describes the characteristics of the day a student was born, to "Hurricane Tracking." Call 905-628-3356 (Fax: 905-628-3392), or write to Trip Software, P.O. Box 65534, Dundas Postal Outlet, Dundas, Ontario, Canada

DRAFT OF SOCIAL STUDIES STANDARDS FOR GEOGRAPHY RELEASED

Listed below are descriptions of the summary of the Geography Standards, recently released as part of the Social Studies Content Standards by the Social Studies Curriculum Framework Commission.

GEOGRAPHY

Students should possess a knowledge of geography and an ability to apply a geographical perspective to life situations. All physical phenomena and human activities exist in space as well as time. Geography studies the relationships of people, places, and environments from the perspective of *where* they occur, why they are there, and what meaning those locations have for us. Students with the knowledge and perspectives of geography understand the environmental and human processes that shape the Earth's surface, and recognize the culturally distinctive ways people interact with the natural world to produce unique places. An appreciation of the nature of their world and their place in it will better prepare students for a physical environment more threatened and a global economy more competitive and interconnected.

Geography Standard One: Students will develop a personal geographic framework, or "mental map," and understand the uses of maps and other geo-graphics.[MAPS]

A mental map is a person's internalized picture of a part of the Earth's surface. It helps make sense of the world by storing and recalling information about the patterns of the Earth's human and natural features. A well-developed mental map is a great asset in understanding local, national, and world events. Students need to develop mental maps which reflect the relative location and knowledge of major landforms and climatic zones, human settlements, political divisions, and economic activities at local, state, national, and world scales. Students also need to develop the ability to create, use, and interpret maps and other geo-graphics crucial to analyzing and solving geographic problems.

The complexity of the standard will increase at each succeeding grade cluster:

K-3: Students will understand the nature and uses of maps, globes, and other geo-graphics

4-5: Students will demonstrate development of mental maps of Delaware and of the United States which include the relative location and characteristics of major physical features, political divisions, and human settlements

6-8: Students will demonstrate mental maps of the world and its sub-regions which include the relative location and characteristics of major physical features, political divisions, and human settlements.

9-12: Students will identify geographic patterns which emerge when collected data is mapped.

9-12: Students will analyze mapped patterns through the application of common geographic principles such as hierarchy, accessibility, diffusion, and complementarity.

9-12: Students will apply the analysis of mapped patterns to the solution of problems.

Geography Standard Two: Students will develop a knowledge of the ways humans modify and react to the natural environment.[ENVIRONMENT]

The relationship between human needs and the natural environment is fundamental to life. Humans modify the environment in culturally distinctive ways as they react to the resource opportunities and risks present in the physical world. To understand this relationship, students must know of the major processes which shape the world into distinctive physical environments, and gain awareness of the opportunities and limitations to human action presented by those environments.

The complexity of the standard will increase at each succeeding grade cluster:

K-3: Students will distinguish different types of climate and landforms and explain why they occur.

4-5: Students will apply a knowledge of topography, climate, soils, and vegetation of Delaware and the United States to understand how human society changes and is affected by the physical environment.

6-8: Students will apply a knowledge of the major processes shaping natural environments to understand how different peoples have changed and been affected by physical environments in the world's sub-regions.

9-12: Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales.

This standard at all grade levels may be integrated with Standard 5 and 8 of the Science Standards

Geography Standard Three: Develop an understanding of the diversity of human culture and the unique nature of places.[PLACES]

Cultural differences produce patterns of diversity in language, religion, economic activity, social custom, and political organization across the Earth's surface. Places reflect the culture of the inhabitants as well as the ways that culture has changed over time. Places also reflect the connections and flow of information, goods and ideas, with other places. Students who will live in an increasingly interconnected world need an understanding of the processes which produce distinctive places and how those places change over time.

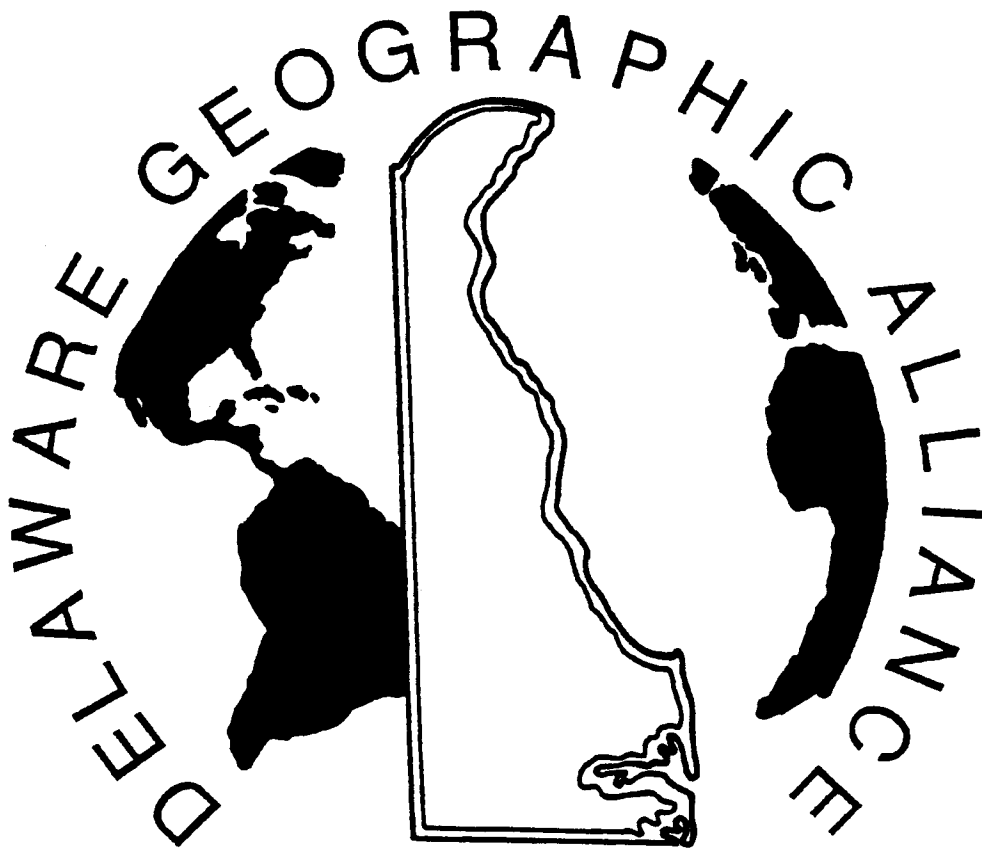
The complexity of the standard will increase at each succeeding grade cluster:

K-3: Students will identify types of human settlement, connections between settlements, and the types of activities found in each.

4-5: Students will understand the reasons for the location of settlements and for the routes of connection to other settlements.

DELAWARE GEOGRAPHIC ALLIANCE
SUMMER GEOGRAPHY INSTITUTE
FOR TEACHERS

JUNE 18 - 30, 1995



THEME:

**TEACHING GEOGRAPHY: FROM THE STANDARDS TO THE
CLASSROOM**

FACULTY

DIRECTOR:

Kris Knarr, McIlvaine School, C.R. District
NGS-trained Teacher-Consultant

ADDITIONAL FACULTY

Judy Purcell, Banneker School, Milford District
Alliance-trained Teacher-Consultant

MaryAnna Taylor, University of Delaware
NGS-trained Teacher-Consultant

Neil Webster, William Penn High School, Colonial
District; Alliance-trained Teacher-Consultant

Peter Rees, Associate Professor, Geography
University of Delaware

Other guest faculty will be added.

LOCATION and DATES

June 18 - June 23:
Virden Center, Lewes, Delaware

June 25 - June 30:
Department of Geography, Pearson Hall,
University of Delaware

The two-week institute is residential. There will be no charge to participants at either location. Please note that the Institute does not meet on June 24.

COURSE REQUIREMENTS

The Institute carries four graduate credits from the University of Delaware. The grade will be based on:

- A final essay-oriented exam (performance type)
- Performance on workshop presentation - how well is the method followed.
- Participation in class and field trip activities

CONTENT

- Introducing geography lessons and materials which apply the Social Studies and Science Standards to classroom instruction
- Demonstration of teaching materials and strategies for presenting geography in the classroom according to the new state standards, as a subject on its own and as part of other subjects
- Overview of the academic discipline of geography
- Techniques and practice in presenting lesson ideas to small groups of fellow teachers
- Demonstration of interactive learning through analysis of geographic themes in the field
- Exploration of Delaware's landscapes, and their connection to the wider world
- Introduction to performance assessment in geography

FIELD TRIPS

- Sussex County: agriculture and urbanization in conflict
- The Atlantic Coast: use, conservation, and sea-level rise
- Kent County: a transect of the settlement hierarchy focussed on the spreading influence of Dover's growth
- Northern NewCastle County: human resources in the physical environment
- Wilmington: ethnic neighborhoods, social distinctions, and economic growth

DELAWARE GEOGRAPHIC ALLIANCE

1995

SUMMER GEOGRAPHY INSTITUTE

FOR TEACHERS

JUNE 18 - 30, 1995

APPLICATION FORM

**APPLICATION FOR SUMMER GEOGRAPHY INSTITUTE
FOR TEACHERS**

NAME _____ SOCIAL SECURITY NO _____

HOME ADDRESS _____

_____ PHONE _____

SCHOOL NAME _____ DISTRICT _____

ADDRESS _____

_____ PHONE _____

GRADES/SUBJECTS PRESENTLY TAUGHT _____

NUMBER OF YEARS OF TEACHING _____

ANY PREVIOUS GEOG. COURSES/WORKSHOPS? _____

Agreement

In signing below, I agree that if accepted to the Institute:

1. I have the time to be a participant in all aspects of the two-week Institute from June 18 - June 30, 1995; and

2. I will participate in at least three workshops presenting sample lessons to fellow teachers during the 1995-96 school year, with the support of the Alliance. If admitted to the Institute I will request a letter from a principal or other administrator supporting this obligation.

SIGNATURE _____

DATE _____

PLEASE PROVIDE A STATEMENT IN THE SPACE BELOW DESCRIBING YOUR REASONS FOR WISHING TO ATTEND THE INSTITUTE

Please return the completed application no later than **APRIL 30, 1995 via state or U.S. Mail to:**

**DELAWARE GEOGRAPHIC ALLIANCE
Department of Geography
University of Delaware
Newark, DE 19716**

TO:
DELAWARE GEOGRAPHIC ALLIANCE
Department of Geography
University of Delaware
Newark, DE 19716

INSTRUCTION AND ATMOSPHERE

Instructional emphasis is on interactive learning and includes:

- lectures
- discussions
- simulations
- computer geography lessons
- hands-on trials of geography teaching strategies and materials

Atmosphere:

- relaxed and informal
- dress is casual
- opportunities to interact with colleagues are continuous
- social events include a crab feast, harbor excursion, barbecue, and a games night
- staff seek to build group camaraderie towards the common goal of advancing geographic education in Delaware.

COSTS

The Alliance, funded with grants from the National Geographic Society and the State of Delaware, will provide most of the costs of participation, including:

- all group meals, including breakfasts, lunches, and most evening meals
- accommodations
- field trip transportation, and campus parking
- all required textbooks and copies of presented lesson plans
- University of Delaware Summer School tuition fees are waived for public school teachers; for private school teachers, the alliance will match up to \$200 any grants to participants from schools and/or parishes.

ELIGIBILITY

- Teachers of any grade K - 12, who expect to teach in a Delaware public or private school in the 1995-96 school year
- Teachers of any subject from English, reading, languages, music, art, mathematics, sciences to social studies
- No prior knowledge of geography is necessary; just an interest in integrating geography concepts into existing subject areas

INSTITUTE BENEFITS

- receive the latest ideas about teaching geography in a way which will respond to the new State Social Studies and Science Standards in a practical form you can immediately use in your classroom
- become connected to an active national and statewide network of teachers interested in geography
- receive over \$300 worth of teaching materials for your classroom, provided by the Alliance and the National Geographic Society
- receive copies of lesson plans, ready to use in your classroom
- explore and appreciate parts of Delaware you have never before encountered - we guarantee!
- receive four graduate credits from the University of Delaware (Institute participation requires registration)

APPLICATION PROCEDURE

Complete the attached application and mail to the Alliance no later than April 30, 1995. Admission decisions are made on a rolling basis and the 24 available places may be filled before the deadline date, so please apply as early as possible.

Delaware Geographic Alliance
Department of Geography
University of Delaware
Newark, DE 19716

Geography Standard Three (continued)

6-8: Students will identify and explain the major cultural patterns of human activity in the world's sub-regions.

9-12: Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.

Geography Standard Four: Students will develop an understanding of the character and use of regions and the connections between them.[REGIONS]

Regions are areas containing places with common characteristics. They are a major way we simplify a geographically-complex world. Regions can be used for analysis and synthesis. They have practical applications as in political administration or organizing economic behavior. Understanding regions and their use will allow students to better analyze and predict patterns and connections between people, places, and environments.

The complexity of the standard will increase at each succeeding grade cluster:

K-3: Students will use the concepts of place and region to explain simple patterns of connections between places across the country and the world.

4-5: Students will apply geographic skills to develop a profile of the local community, placing it in the context of physical, cultural, and other types of regions.

6-8: Students will understand the processes affecting the location of economic activities in different world regions.

6-8: Students will explain how conflict and cooperation among people contributes to the division of the Earth's surface into distinctive cultural regions and political territories.

9-12: Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity.

A complete copy of the Draft Standards has been sent to every teacher in the State. In the complete copy, each standard is matched with a number of "Sample Activities" that are designed to give a better feeling for how each standard might appear when taught in the classroom. These examples, while they are not meant to represent complete lessons or assessments, are useful in clarifying the meaning and intent of each standard. There are also

connection boxes which show how each standard might be connected to others with an integrated lesson. In the Geography section, there are a large number of these sample activities and connections, many derived from sample lessons presented by our Teacher-Consultants, and others selected from the National Geography Standards. Be sure to complete the review form contained in the complete copy, and give us your reaction.

GEOGRAPHY AND MUSIC TO BE THEME OF SPRING MEETING

Every spring, the Alliance holds a dinner meeting for teachers featuring a distinguished guest presenter. This year's theme is "Geography and the Origins of American Folk Music" presented by Dr. Allan Jabbour, Director of the American Folk Life Center of the Library of Congress. Dr. Jabbour gives an intriguing and highly unusual presentation, which includes demonstrating on a fiddle the elements of familiar folk tunes, where they come from and how they are woven into a final piece. The presentation underscores the numerous ways geographic themes find expression, in this case in cultural history and the arts. Watch for a registration flyer in the mail to you next month. The Spring dinner meeting will be held at Maple Dale Country Club in Dover on **March 23, 1995**.

TEACHING UNITS ON MAPS AND GLOBAL CHANGE

Three **free** teaching units available from the United States Geological Survey (USGS), **Exploring Maps and What Do Maps Show?**, and suitable for grades 4-8, offer lessons on the uses of different maps, as well the relationship of the history of map making and exploration. **Global Change**, suitable for grades 4-6, explores the topic of a changing earth environment, how the changes are discovered, and what they mean for our lives. Each unit comes with a teacher's guide to lesson activities, masters for making overheads, and attractive posters. For a copy write to Branch of Publications, National Mapping Division, USGS., 508 National Center, Reston, VA 22092; or, call the USGS at 1-800-USA-MAPS.

GIGI: A HIGH SCHOOL RESOURCE FOR GLOBAL GEOGRAPHY

Encyclopaedia Britannica Educational Corp. has just published an issues-based inquiry curriculum called Geographical Inquiry into Global Issues (GIGI). Each of the 20 learning modules focusses on a different major region of the world and is

organized according to a particular issue, such as "Why are people hungry?" or How does trade shape the global economy?" Developed by academic geographers and secondary teachers, the modules can be taught as stand-alone units in economics, history, or civics courses, or can be combined to produce a complete high school world geography course. Each module is set in a primary region, and then the issue compared in a secondary world region as well as being related to the U.S. For instance, a module on "Why do the effects of natural hazards vary from place to place?" uses Japan as the primary case study region, then switches for comparison to Bangladesh, and finally the United States. The activities within each module require students to be active rather than passive learners. Modules are self-contained, with a teacher's guide, activity masters for duplication, student data-books and student mini-atlases.

Although each module is self-contained, Britannica has added inter-active visual material on CD-ROM and Videodisc for those with these technologies. GIGI, already recommended for adoption in Texas, South Carolina, and Oklahoma, represents a new generation of teaching materials designed to address the national geography standards. For more information, call Emily Clott at 1-800-554-9862.

ARGUS NOW PUBLISHED

Activities and Readings in the Geography of the United States (ARGUS) has been described in previous newsletters. Appropriate for grades 8-12, ARGUS is organized, like GIGI, as a series of inquiry-based modules, but focussed on the history and geography of the United States. ARGUS has now been published in an inexpensive form with numerous activity-based lessons which teach students geographic and other analytical skills, as well as content about different parts of the U.S. One copy costs \$40 which allows one teacher to use the materials for a single class. Two or more copies \$35 each. Call Laura Culp at 202-234-1450 for ordering information, or TC Neil Webster (Wm. Penn H.S.)(302-323-2809) who is now using ARGUS in a half-year geography course.

DELAWARE GEOGRAPHIC ALLIANCE

WORKSHOP

COMPUTER MAPPING AND ANALYSIS IN THE HIGH SCHOOL CLASSROOM: AN INTRODUCTION TO ArcVIEW GEOGRAPHIC INFORMATION SYSTEM (GIS)

SATURDAY, FEBRUARY 11, 1995
9.00 a.m. - 4.00 p.m.

UNIVERSITY OF DELAWARE NEWARK CAMPUS

A brand new technology - matching data sets with computer mapping software to produce an infinite variety of maps - has entered the government and business workplace. Called Geographic Information Systems (GIS), it is presenting new tasks for 21st century citizens to master, as everyone from the police and firefighters to salespersons to executives use more and more mapped information to solve their problems.

This workshop is designed as an introduction to **ArcView**, a software package for schools. Unlike much computer education technology which merely mimics what we already do in our classrooms, this GIS technology turns students into geographic scientists, able to create maps from their own data and manipulate geographic data to confirm their own hypotheses. It means hands-on learning which will excite and hold student attention.

The presenter is Charlie Fitzpatrick, a former Minnesota teacher, presenter at National Geographic Society national institutes, and presently heading the K-12 education effort of Environmental Systems Research Institute, Redlands, California. Charlie is a dynamic and engaging guide to this new form of geographic learning. Spaces are limited so please sign up as soon as possible. Participants will receive demonstration software packages and other information to take back to their schools. Lunch and snacks will be provided at no charge.

Registration Form

Name _____

School _____

Grade _____

- I will attend the Feb. 11 Computer Mapping Workshop. Enclosed is a non-refundable registration fee of \$10 (make checks payable to: "University of Delaware")

Your registration will be confirmed upon receipt, together with directions. Send via State or U.S. Mail to:

Delaware Geographic Alliance
Department of Geography, University of Delaware
Newark, DE 19716
(Phone: 302-831-6783)

**DELAWARE GEOGRAPHIC ALLIANCE
SPRING - 1995 CALENDAR**

January 28	Oberod Conference for TCs
February 11	ARCVIEW Workshop, University of Delaware
February 13	Steering Committee Meeting
February 28	Deadline for American Express Competition
March 4	National Diffusion Network Workshop, Rehoboth Beach
March 23	Spring Dinner Meeting, Maple Dale Country Club
April 3	Steering Committee Meeting
April 7	State Geography BEE
April 29	History Day Competition
May 6	Sussex County Workshop
May 22	Steering Committee Meeting
June 18-30	Alliance Summer Geography Institute

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