Math Team Wins State Meet

by Steve Godsoe

Students on Bangor High School Math Teams had a great year. This year there were six teams (Red, White, Gold, Silver, Bronze, and Platinum) with 110 team members. The Red Team finished second to Maine School of Science and Mathematics out of 123 teams in the regular season. But in the State Meet, the Red Team of Eric Brown, Melanie Craig, Stephen Kiel, David Kleinschmidt, Andrew Kwak, Ethan Lambert, Donald Lewis, Kayle Shapero, Jue Wang and Ben Weissman came in first out of ninety-five schools. Our other teams also did very well, all finishing in the top half of the State: Gold (25th), Bronze (26th), White (30th), Silver (42nd) and Platinum (59th). Jue, David and Andrew were second, fourth and ninth respectively in Maine out of more than twelve hundred students.

Bangor students were among the highest scorers in Eastern Maine, listed here by grade:

Freshmen Eugene Abramov (1st), Samantha Jannerga (6th);

Sophomores Melanie Craig (2nd), Andrew Yau (3rd), Austin Smith (6th), Miri Kim (8th);

Juniors Jue Wang (2nd), David Kleinschmidt (3rd), Andrew Kwak (4th), Ben Weissman (7th), Ethan Lambert (8th), Donal Lewis (10th), Eric Brown (11th);

Seniors Kayle Shapero (3rd), Stephen Kiel (4th), Nathan Goodell (9th), Amber Knowlton (14th).

Bangor High had 36 out of the top 100 competitors in Eastern Maine. Bangor High School was also invited to the New England Invitational Meet in Canton, Massachusetts, for the fifteenth time in the past sixteen years as one of the highest scoring teams in Maine.

In the American High School Mathematics Exam, ten Bangor students scored over 100 (the highest number for BHS ever) and qualify for the American Invitational Mathematics Exam.

In the New England Mathematics League, where over two hundred BHS students participated, we came in twelfth out of approximately one hundred eighty schools and second in Maine.

It is clear that the students who strive to improve their mathematical skills by competing in these contests gain much more than awards. Often, their overall mathematical understanding and strength improves dramatically. Many are not satisfied unless they achieve an 800 on the mathematics portions of the SAT I and SAT II exams. Jue Wang had an outstanding SAT I score of 1580 this year. Amazingly, that placed him fourth in the school, since James Bailey, David Kleinschmidt and Ben Weissman all had 1600's. Congratulations to these talented students and to all the other worthy Bangor High students who help to make this another outstanding year for our mathematics teams.

CHINESE CELEBRATION: Fruit Street School marked Chinese New Year with a school-wide assembly. Students prepared for the occasion by making dragon masks, puppets and hats in their art classes. They also learned Chinese songs and dances in their music classes. Community member Steven Wong demonstrated an authentic lion dance. All classrooms paraded around the gymnasium behind the lion wearing their hats and masks and moving their puppets to the beat of the drum.

FESTIVE: Below, Fruit St. student-created puppets and traced hand cut-outs to use on wall decorations. Also a close-up of an authentic Chinese lion costume.

SHELTERS: Students in Senior Seminar produced the map at right, which shows emergency shelters throughout the city. This map will be used by public safety officials and citizens in the event of an emergency.

List of Emergency Shelters

1 **Bangor Baptist Church**
1476 Broadway • 947-6576

2 **Unitarian Universalist Church**
120 Park Street • 947-7009

3 **St. John's Episcopal Church**
225 French Street • 947-0156

4 **Advent Christian Church**
2141 Broadway • 942-4327

5 **ME Air Guard Training Ctr.**
Glen Road • 942-7667

6 **Bangor Civic Center**
100 Dunton Street • 942-9000

7 **Bangor High School**
885 Broadway • 941-6200

8 **William S. Cohen School**
304 Garland Street • 941-6230

9 **Downeast School**
100 Moosehead Blvd. • 941-6240

10 **Vine Street School**
66 Vine Street • 941-6300

11 **Bangor Parks & Rec.**
641 Main Street • 947-5665

12 **James F. Doughty School**
143 Fifth Street • 941-6220

13 **Fairmount School**
58 Thirteenth Street • 942-6260

14 **Mary Snow School**
435 Broadway • 941-6290

15 **Abraham Lincoln School**
45 Forest Avenue • 941-6280

16 **Fourteenth Street School**
224 Fourteenth Street • 941-6350

17 **Fruit Street School**
175 Fruit Street • 941-6270

Maine Academic Decathlon

by Steve Godsoe

Bangor High School entered a team in the Maine Academic Decathlon State Contest this year. Each student competed in ten different disciplines including Art, Economics, Essay, Interview, Language/Literature, Mathematics, Music, Science, Social Science and Speech. The team of Jue Wang, David Kleinschmidt, Janice Gunther, Shane White, Nate Goodell, Erik Alquist, Matthew Werrbach and James Innis was third in Maine, which is the highest first-year score ever. Jue, David and Janice were the first, second and third scorers for the team. Several teachers helped to coach this team including Mark Brittelli, Lance Fenimore, Kathleen Hartley, Regina Kelly, Helmut Koch, Tori Kornfield, Joanne Miller, John Purton, George Redman and Steve Godsoe. Individual awards were won by:

Erik Alquist - (Silver, Economics)

James Bailey - (Gold, Economics; Silver, Science; Bronze, Music; Gold, Literature; Silver, Art)

Kyle Cronin - (Gold, Math)

Nate Goodell - (Bronze, Math)

Janice Gunther - (Gold, Music)

Ben Holsapple - (Gold, Music; Silver, Math)

James Innis - (Bronze, Essay; Bronze, Math; Silver, Economics; Bronze, Art; Silver, Science)

Donald Lewis - (Bronze, Math)

Elizabeth Malmer - (Bronze, Science)

Kayle Shapero - (Silver, Essay; Bronze, Math; Silver, Art)

Jue Wang - (Bronze, Speech; Bronze, Interview; Silver, Math)

Matt Werrbach - (Bronze, Literature)

Ben Weissman - (Silver, Math; Silver, Economics; Silver, Literature)

Students Create Hazards Map for City Officials

by Brad Neumann and Eva Hedefine

Students at Bangor High School have joined Bangor's Police and Fire Departments to develop maps that will enhance the city's emergency response systems. The students utilized Geographic Information Systems (GIS) and Global Positioning Systems (GPS) to produce emergency response maps for both public safety officials and citizens to utilize in an emergency.

Collaboration between the City of Bangor and BHS students was established by the GK-12 Sensors! Project at BHS. The GK-12 Project's goal is to enhance science and math education and to inspire students to pursue careers in related fields. In the fall of 2003, the GK-12 Sensors! Project was awarded a supplemental grant to integrate technology education in the social sciences.

GK-12 Sensors! Fellows Brad Neumann and Eeva Hedefine worked closely with BHS Senior Seminar classes taught by James Smith. Senior Seminar has a legacy of involvement in community and state government.

The project was structured to meet the following goals:

- *Advance students' knowledge of sensor technology through hands-on application.*
- *Provide students with a community service initiative that will produce tangible results for the community.*
- *Provide citizens of Bangor with emergency response information.*
- *Introduce GIS applications to Bangor's public safety services.*
- *Provide Bangor's public safety with emergency response maps.*

Students not only learned theory and methods, but also how to apply this knowledge to a real-world project. They also shared their knowledge and products with city officials in order to enhance the safety of Bangor citizens.

Student involvement in the project began with the introduction to GIS through hands-on labs conducted in Senior Seminar classes. These labs provided students with the basic skills needed to tackle the challenges of the emergency response mapping.

Following the labs, interested students began meeting with GK-12 Fellows once a week after school. Students decided what information to include and how the data collection process should be conducted. The group then began to contact facilities throughout the community in order to obtain the necessary information. These facilities included Bangor School Department offices, the Red Cross, and nursing homes within the city.

Students acquired addresses of facilities such as hazardous sites, schools, hospitals, nursing homes and emergency shelters, and entered this information into tables. After compiling the location data, the next step was to "ground truth" the points plotted on the map in order to correct for any error. This required students to travel to each facility and compare its actual GPS location to the location represented on the map.

This effort has aided Bangor Police and Fire Departments to apply GIS technology for emergency response. GIS will facilitate quicker responses and greater knowledge of public facilities.

Students have greatly benefited from their involvement in this community GIS project. They have developed confidence in their abilities to work with technology and have provided a valuable resource to their community.

HAZARDS: Seniors at BHS plotted locations of emergency shelters and other points of importance for Bangor public safety officials. The group compared addresses, map locations and GPS readings to "ground truth" their data.